## **TECHNICAL MANUAL**

# **USER'S GUIDE** RDA/RPG REMOTE ACCESS TERMINAL

# DOPPLER METEOROLOGICAL RADAR WSR-88D



**UNISYS CORPORATION CONTRACT 50-DMNW-8-00032** 

<u>Distribution Statement A</u> - Approved for public release; distribution is unlimited.

PUBLISHED UNDER AUTHORITY OF THE SECRETARIES OF COMMERCE, THE AIR FORCE, THE NAVY, AND TRANSPORTATION

# TABLE OF CONTENTS

I. (	OVERVIEW		
	1-1.	INTRODUCTION	1-1
	1-2.	FUNCTION KEYS AND CONVERSIONS BETWEEN THE	
		CDT-100 AND THE RDA/RPG REMOTE ACCESS TERMINAL	1-1
	1-3.	PCANYWHERE	1-4
	1-4.	RDA/RPG REMOTE ACCESS TERMINAL BOOT PROCEDURES	1-5
	1-5.	SHUT DOWN	1-6
	1-6.	TROUBLESHOOTING	1-6
II. (	<b>DPERATING</b>	THE TERMINAL	2-1
	2-1.	PHYSICAL FEATURES	
	2-2.	MONITOR CONTROL PANEL FUNCTIONS AND CONTROLS	2-4
	2-3.	USING THE MONITOR ON SCREEN DISPLAY	
	2-4.	SOUND SELECTION AND ADJUSTMENT	
	2-5.	POWERING ON THE TERMINAL	
	2-6.	TERMINAL ADJUSTMENT	
	2-6.1.	Monitor	
	2-6.2.	Screen Brightness and Contrast Control	
	2-6.3.	Keyboard	
	2-6.4.	Setup Configuration Adjustments:	
	2-7.	KEYBOARD LAYOUT	
	2-7.1.	Auto Repeat Function	
	2-7.1.	Using the General Function Keys	
	2-8.	COMMON KEYSTROKES START-UP, SHUTDOWN AND	4-0
	<b>2-0.</b>	RECOVERY METHODS.	9 19
	2-9.	MESSAGES AND STATUS LINES	
	2-9. 2-10.	MOUSE SUPPORT	
	2-10. 2-11.	TROUBLESHOOTING	
	2-11. 2-12.	PROTECTING THE HARDWARE AND SOFTWARE	<b>2-1</b> i
	2-12.	FROM DAMAGE	0.15
		FROM DAMAGE	2-16
ттт	MAINITAINI	ING THE TERMINAL	2 1
111.	3-1.	SITE SELECTION FOR RDA/RPG REMOTE ACCESS	3-1
	3-1.	TERMINAL IN THE UCP POSITION	2.0
	0.1.1		
	3-1.1.	Electrical Requirements	
	3-1.2.	Interface Requirements	
	3-2.	TERMINAL CONNECTION	
	3-3.	LED STATUS INDICATORS	
	3-4.	DESCRIPTION OF EMULATION FUNCTION KEYS	
	3-4.1.	Setup Effects on the Keyboard	
	3-4.2.	Alphanumeric Keys	
	3-4.3.	Using the Cursor Control Keys	
	3-4.4.	Using the Numeric Keypad	
	3-4.5.	Using the Dedicated Control/Function Keys	
	3-5.	MESSAGE AND STATUS LINES	
	3-6.	MOUSE SUPPORT	
	3-6.1.	Using a Mouse in Setup Configuration Mode	3-30
	3-7.	COMMON KEYSTROKES, START-UP, SHUTDOWN AND	
		RECOVERY METHODS.	
	3-8.	CONFIGURATION	
	3-8.1.	Configuration Options	3-35

# **TABLE OF CONTENTS**

3-8.2.	Main Setup Menus	3-35
3-8.3.	Configuration by Maintenance Personnel	
3-8.4.	Terminal Parameter Configuration	
3-8.5.	KBD CTRL Category	
3-8.6.	Esc:	
3-8.7.	Cursor, Edit keys:	3-40
3-8.8.	Kbd Lock Category	
3-8.9.	Mode Category	
3-8.10.	System Category	3-44
3-8.11.	Comm Category	
3-8.12.	Printer Category	3-46
3-8.13.	Com Category	3-47
3-8.14.	Prt Category	3-48
3-8.15.	Terminator Category	3-48
3-8.16.	Splc Char Category	
3-8.17.	Configuration file =	
3-8.18.	Function Keys Category	
3-9.	REMOVAL AND REPLACEMENT PROCEDURES	
3-9.1.	Remove and Replace Procedures for PC in the	
	UCP Position (UD34A9)	3-50
3-9.2.	Remove and Replace for the PC in the RDA MMI Position (UD5A32)	
3-9.3.	Removal and Replacement of the Monitor for the UCP and the	
	RDA MMI Positions	3-58
3-9.4.	Removal and Replacement Procedures for the Keyboard and Mouse	
3-10.	USING ANOTHER PC OR LAPTOP PC FOR REMOTE ACCESS	
3-10.1.	Installing pcANYWHERE on Another PC or Laptop PC	
3-10.2.	pcANYWHERE32 Software Installation on Another PC or Laptop PC	
3-10.3.	Configuring pcANYWHERE on Another PC or Laptop PC	
3-10.4.	Use Another PC or Laptop PC to Access a Host Machine	
	(either the RDA MMI or the UCP terminal)	3-72
3-10.5.	To Disconnect Remote Access using Another PC or Laptop PC	
3-10.6.	Using a Host Machine to Access Another Host Machine	
	(i.e. using either the RDA MMI to access the UCP or vice versa)	3-79
3-10.7.	To Disconnect Remote Access using a Host Machine Operating	
	as a Remote	3-81
3-10.8.	Changing your Login Name/Password	
3-11.	TROUBLESHOOTING A REMOTE SESSION	
3-12.	SYSTEM PROBLEMS	
3-12.1.	The Need to Restore and Reconfigure	
3-12.2.	Software Setup Checklist	
3-12.3.	System Troubleshooting Tips	
3-13.	RESTORAL OF SOFTWARE	
3-13.1.	Windows 95 and Driver Restoral	
3-13.2.	Establish screen saver to prevent screen display "etching"	
3-14.	PC-PASSPORT INSTALLATION AND SETUP PROCEDURES	
3-14.1.	Restoring shortcut ICONs for Applications and Systems Console	
3-14.2.	Insert Icons for System Console and Application Software	
3-14.3.	To Set Up the Applications Software and System Console	
2 = 2.0.	Windows Size and Font.	3-106
3-14.4.	To Set Color Attributes for Passport Screens.	

# **TABLE OF CONTENTS**

	3-14.5.	To Modify the Passport.ini File so that the ALT Key
		will not Initiate Help
	3-14.6.	Protecting the Configuration
	3-14.7.	pcANYWHERE Software Restoral for the Host Terminal 3-115
	3-14.8.	pcANYWHERE32 Software Setup Necessary after Restoral for
		the Host Terminals 3-122
IV.	SECURITY	POLICY4-1
	4-1.	INTRODUCTION 4-1
	4-2.	SCOPE 4-1
	4-3.	POLICY OBJECTIVES
	4-4.	APPLICABLE LEGAL AND POLICY DOCUMENTS 4-1
	4-5.	POLICY STATEMENT
	4-6.	RESPONSIBILITIES
	4-7.	ALLOWED USE OF RDA/RPG REMOTE ACCESS TERMINAL 4-2
	4-8.	USE OF NON-RDA/RPG REMOTE ACCESS TERMINAL SOFTWARE
		ON WSR-88D FACILITIES
	4-9.	PRIVACY
	4-10.	OPERATION
	4-11.	INTERFACES WITH OTHER WSR-88D SYSTEMS 4-3
	4-12.	AUTHORIZED WSR-88D RDA/RPG REMOTE ACCESS TERMINAL 4-3
	4-13.	HOST SECURITY
	4-14.	RESPONDING TO POLICY VIOLATIONS 4-4
	4-15.	POLICY DISTRIBUTION 4-5

# **TABLE OF CONTENTS**

THIS PAGE IS INTENTIONALLY LEFT BLANK.

# LIST OF TABLES

Table 1-1.	Keyboard Function Key Description	1-9
Table 1-2.	UCP CDT-100/RDA/RPG Remote Access Terminal Conversion Chart	1-10
Table 2-1.	On Screen Display Selection	2-6
Table 2-2.	UCP Terminal Function Keys for RDA/RPG Remote Access Terminals	2-11
Table 2-3.	Operator Troubleshooting	2-16
Table 3-1.	COMM3 Pinouts	3-3
Table 3-2.	COMM4 Pinouts	3-4
Table 3-3.	Parallel Pinouts (LPT1)	3-5
Table 3-4.	Monitor Pinouts	3-6
Table 3-5.	Keyboard Pinouts	3-6
Table 3-6.	Mouse Pinouts	3-7
Table 3-7.	UCP Cable Configuration	3-8
Table 3-8.	RDA Cable Configurations	3-11
Table 3-9.	Keyboard Light Combinations with Terminal Lockup	3-15
Table 3-10.	Keyboard Light Combinations with Normal Keyboard Operation	3-15
Table 3-11.	UCP CDT-100 / RDA/RPG Remote Access Terminal Conversion Chart	3-31
Table 3-12.	RDA MMI CDT-100/RDA/RPG Remote Access Terminal Conversion Chart	3-32
Table 3-13.	Option Categories	3-35

# LIST OF TABLES

THIS PAGE IS INTENTIONALLY LEFT BLANK.

# LIST OF FIGURES

Figure 1-1	RDA/RPG Remote Access Terminal, Monitor, and Keyboard	1-2
Figure 1-2.	RDA/RPG Remote Access Terminal Interaction with the RDA and RPG	1-3
Figure 1-3	Keyboard Mask	1-8
Figure 1-4.	pcANYWHERE Main Menu	1-11
Figure 1-5	Split Screen Display in the UCP Position	1-12
Figure 2-1	RDA/RPG Remote Access Terminal (CPU) Front PanelDesktop	
	Rear Panel Components	2-2
Figure 2-2	RDA/RPG Remote Access Terminal (CPU) Back Panel	2-3
Figure 2-3	RDA/RPG Remote Access Terminal Monitor Location and Function Controls	2-5
Figure 2-4	Keyboard Layout	2-8
Figure 2-5	General Function Key Group	2-10
Figure 3-1	Adapter Connection	3-14
Figure 3-2	Keyboard Lights	3-16
Figure 3-3	Cursor Control Key Group.	3-19
Figure 3-4	Numeric Keypad	3-21
Figure 3-5	Sample Configuration Screen	3-36
_		

# **LIST OF FIGURES**

THIS PAGE IS INTENTIONALLY LEFT BLANK.

# I. OVERVIEW

#### 1-1 INTRODUCTION

RDA/RPG Remote Access Terminals replace the CDT-100 terminals which are currently used for interacting with the RDA and RPG (See Figure 1-1 RDA/RPG Remote Access Terminal, Monitor, and Keyboard). Whereas the CDT-100 was a dumb terminal, the RDA/RPG Remote Access Terminal is a PC based platform, running on a Windows 95 operating system.

The RDA/RPG Remote Access Terminal system runs two primary software packages: pcANYWHERE and PC-Passport. PC-Passport is a Concurrent emulator software package, which allows the PC based system to communicate with the Concurrent-based WSR-88D. pcANYWHERE is the communications software package used for remote access.

Combining these two software packages with a Windows 95 provides a user friendly environment for interacting with the WSR-88D and also allows a remote dial-up capability between RDA/RPG Remote Access Terminal hosts. For example, this dial-up capability allows a technician or an operator (having current phone numbers and passwords) sitting at the UCP, to dial into the RDA MMI and access both the Applications and System Console. Conversely, a person sitting at the RDA can dial into the UCP and access the Applications and the System Console there. Finally, a person with a laptop computer, such as an off duty technician, has the capability to dial into either system. Possible use of this capability includes a technician to reboot the RDA from his home, or an operator obtaining remote control because the system was inadvertently left with "local" controlling.

Figure 1-1 RDA/RPG Remote Access Terminal, Monitor, and Keyboard graphically illustrates the capabilities of various connections of this system.

Specifically, the RDA/RPG Remote Access Terminal provides the following capabilities: (Note: Dial access presupposes an authorized user with access to phone numbers and passwords.)

- Dial in access to the RDA MMI and System Console using the RDA/RPG Remote Access Terminal located in the UCP or a remote laptop.
- Dial in access to the RPG Applications and System Console using the RDA/RPG Remote Access Terminal located in the RDA MMI or a remote laptop.
- User friendly graphical interface likely to be familiar to most operators.
- Ability to easily switch between Applications and System Console using either a mouse or the Windows 95 keyboard commands.
- Booting up and shutting down the RDA/RPG Remote Access Terminal using familiar Windows 95 commands

# 1-2 FUNCTION KEYS AND CONVERSIONS BETWEEN THE CDT-100 AND THE RDA/RPG REMOTE ACCESS TERMINAL

The familiar function keys on the CDT-100 have been replicated on the RDA/RPG Remote Access Terminal. A keyboard template is provided with each system showing the functionality of each function key. Figure 1-3 Keyboard Mask shows what the template looks like and Table 1-1 Keyboard Function Key Description is a listing of the function keys showing more detail.

There are a couple of important differences which users should be aware of, prior to working with the system. On the RDA/RPG Remote Access Terminal the **<Alt>U** command takes the place of the **<Break>** key on the CDT-100 and should be used whenever the keyboard is "locked". One very important command/key sequence is the **<Ctrl><Pause/Break>** key. This combination (2 keys) refreshes the screen and should be used whenever the screen appears garbled. Always use this command to refresh the screen after an **<Alt>U** command is entered. Table 1-2 UCP CDT-100/RDA/

TOC

LOT

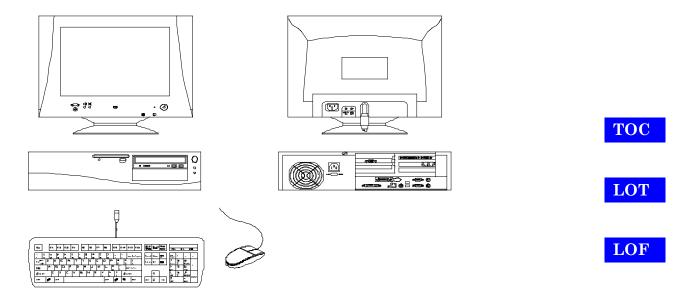


Figure 1-1 RDA/RPG Remote Access Terminal, Monitor, and Keyboard

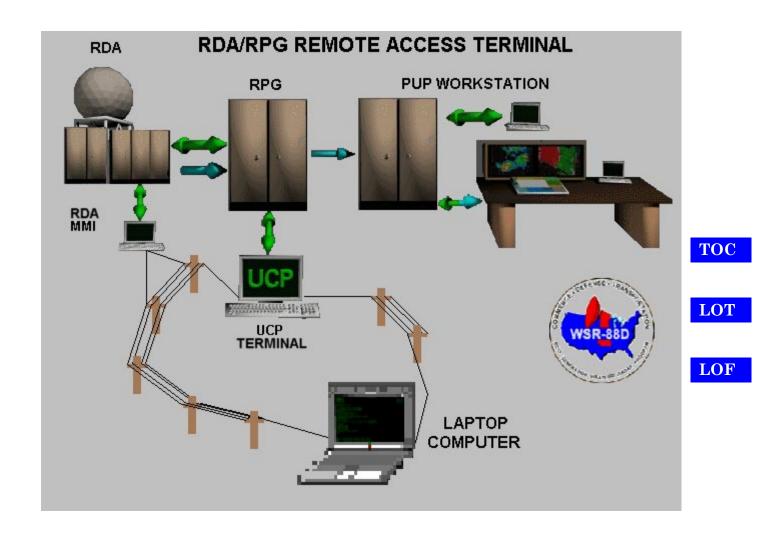


Figure 1-2. RDA/RPG Remote Access Terminal Interaction with the RDA and RPG

RPG Remote Access Terminal Conversion Chart is a comprehensive list of the conversions between the CDT-100 keystrokes and the RDA/RPG Remote Access Terminal keystrokes at the UCP. Table 1-2, UCP CDT-100/RDA/RPG Remote Access Terminal Conversion Chart, is a list showing the conversion between the CDT-100 and the RDA/RPG Remote Access Terminal keystrokes at the RDA MMI.

The RDA/RPG Remote Access Terminal is a Windows 95 based system, so many of the windows and file manipulation techniques which work in other Windows 95 applications will also work with the RDA/RPG Remote Access Terminal. For example, if you like working in a full screen mode, you can use the **Alt>Enter>** key combination to toggle between a full screen and a window. You can also move windows by clicking and dragging the title bar and windows can be sized by "grabbing" an edge. You can cut and paste from the text within the windows by clicking the **MSDOS** icon at the top of the windows, then click **EDIT**. Select **MARK** or **COPY** as appropriate. By using Wordpad, provided in the Accessories directory of Windows 95, you can paste any comments which have been copied to the clipboard. This Wordpad file can then be named and saved just like any other file.

#### Note

This manual assumes that the user has had some experience with Windows 3.1 or higher. If the user is not familiar with such Windows terms as "dialog boxes," "icons," or "menus," read Microsoft's booklet for basic Windows information delivered with the RDA/RPG Remote Access Terminal equipment. The booklet is entitled "Windows 95".

This manual also assumes use of a right-handed mouse with the left button being the primary button. When instructed to click or to double click on an item, use the left button of the mouse. Directions will be provided to use the right mouse button when needed.

#### 1-3 PCANYWHERE

pcANYWHERE is responsible for the new dial in capability and is automatically loaded on bootup and runs in the background. You can tell if it is operating by looking at the Windows 95 Tool Bar, by a task button stating pcANYWHERE Waiting. It is easy to inadvertently close the pcANYWHERE software. If you select the button on the Windows 95 Tool Bar, look at it, then select **Cancel** you have just closed the software and must restart it. Use the following steps to restart pcANYWHERE.

- 1. At the Windows 95 Tool Bar, select the **Start** button.
- 2. Select **Programs**.
- 3. Select **pcANYWHERE32**.
- 4. Select **pcANYWHERE**. The software starts. See Figure 1-4. pcANYWHERE Main Menu, for a screen shot showing the pcANYWHERE main menu.
- 5. Double click on the **Modem** icon. This will initialize the software, put pcANY-WHERE in a waiting state, and put pcANYWHERE Waiting button in the Windows 95 Tool Bar.

If someone dials into your RDA/RPG Remote Access Terminal, the pcANYWHERE icon on the Windows 95 Tool Bar will change to In Session.

Additionally, you will see all movements made at the remote end echoed on your screen. The mouse cursor will move, commands will be printed, etc. If so desired, you can chat with the person at the remote end by typing a message at the asterisk prompt at the System Console. When you press the

TOC

LOT

**Enter>** key you will get a mnemonic error, but the person at the other end will see your message and will be able to respond similarly.

#### 1-4 RDA/RPG REMOTE ACCESS TERMINAL BOOT PROCEDURES

- A. Cold Boot (RDA/RPG Remote Access Terminal is off)
  - 1. Switch the Monitor Power ON/OFF switch to the **ON** position.
  - 2. Switch the CPU Power ON/OFF switch to the **ON** position.
    - (a) The system will go through a normal Windows 95 bootup and in the process will load the pcANYWHERE and the PC-Passport software, initialize the modem, and connect to the appropriate Concurrent computer (RPG or RDA).
    - (b) Upon completion of boot-up, if the system is running correctly, an Applications window and a System Console window will be present. You can move between the windows by clicking the title bar of the window with the mouse cursor or by using the <Shift><Tab> key sequence. These are standard ways of moving between windows in a Microsoft Windows 95 environment. Figure 1-5 Split Screen Display in the UCP Position is a screen capture showing how a properly operating system will look. Although in this picture, the Applications window is shown over the System Console window, your office configuration may be different. For example, you may run full screen, or your windows may overlap. This does not cause a problem operationally, but when you reboot the system for any reason, your desktop will look as it did before you rebooted. What is operational significant is that you must ensure that the buttons on your task bar are the same as those on the task bar in the figure. This ensures the correct applications are running. If the system is not running correctly, see paragraph 1-6 Troubleshooting or Chapter III. MAINTAINING THE TERMINAL, covering Troubleshooting.

#### Note

Placing the cursor anywhere within a window, and then clicking, will make that window active; however, the cursor may be on the application's command line. This may lead to some confusion as command will not be accepted on just any location on the screen. Therefore, it is best to click on the window title bar when the cursor/mouse is used to select the window.

- b. Warm Boot (RDA/RPG Remote Access Terminal is On)
  - 1. <u>Use this procedure if the keyboard responds to commands.</u> If the Applications and/or the System Console windows are open, close the current window (The title bar is highlighted) by entering **Alt>X** twice. If the other window is open, it should become the active window automatically (the title bar is highlighted). If not, select it by clicking on the Title Bar with the mouse and entering **Alt>X** twice to close it. If the pcanywhere waiting button is showing on the Windows 95 Tool Bar, select it and then select **Cancel**. Then at the Windows 95 Tool Bar, select the **Start**, **Shutdown**, **Restart the computer?**, and then select **Yes**.

TOC

LOT

- 2. <u>Use this procedure if the keyboard is unresponsive</u>. First try pressing <**Alt>U** to unlock the keyboard, and then if at the UCP, refresh the screen by pressing <**Ctrl><Break>**. If at the RDA MMI, use <**F1>** to refresh the screen. If the keyboard is still unresponsive, then attempt to close the application by clicking the **x** in the upper right hand corner of each open window. Next attempt to close the pcANYWHERE software as indicated in step 1 above. If you receive a windows message box, answer the question/prompt in the appropriate manner to continue the shutdown.
- 3. <u>Use this procedure if step 2 does not work.</u> Press the CPU Power On/Off button to initiate the reboot sequence. If after the reboot, the system does not come up normally, see paragraph 1-6 Troubleshooting, or Chapter III. MAINTAINING THE TERMINAL, covering troubleshooting.

#### 1-5 SHUT DOWN

This procedure is used to shut down the RDA/RPG Remote Access Terminal ONLY. The RDA/RPG is NOT shut down using this procedure.

TOC

- A. If Applications and/or System Console windows are open, close the current window (Title Bar is highlighted) by typing **<Alt>X** twice. If the other window is open, it should become current automatically (Title Bar becomes highlighted). If not, select it by clicking the Title Bar with the mouse and enter **<Alt>X** twice to close it. If the pcanywhere waiting button is shown on the Windows 95 Tool Bar, click it, and then select **Cancel**. Then at the Windows 95 Tool Bar select **Start**, **Shutdown**, **Shutdown the computer?** and then select **Yes**.
- LOT

LOF

B. The power indicator on the monitor will change from a green color to a red color when the computer shuts off. Press the Monitor Power On/OFF switch to the OFF position.

#### 1-6 TROUBLESHOOTING

A. Software troubleshooting.

Symptom	Possible Cause	Solution
Unable to dial into a host (either the RPG or RDA RDA/RPG Remote Access Terminals)	pcANYWHERE software has been canceled or is not working.	1. If a button labeled pcanywhere Waiting is not on the task bar, then load the pcanywhere software.  2. If the button is present then cancel the software using the procedures in "Shut Down" above and then restart the software.
Any one, or all of the Applications, Software, or pcAN-YWHERE windows are not present.	They were closed	The icons for each application appears on the desktop. Double click each to start the application.
Keyboard is locked or unresponsive.	Unknown error or the keyboard is not connected.	<al><li>Alt&gt;U and/or check keyboard for connection.</li></al>
Screen is garbled	Overrun Error	UCP: <b><ctrl><break></break></ctrl></b> RDA: <b><f1></f1></b>
No Power	Not plugged in or not turned on or circuit breaker tripped on surge protector	Verify that the CPU, Monitor and Surge Protector are plugged in and connected correctly, and reset the surge protector.
No mouse response	Mouse cable is disconnected or loose.	Reconnect cable.
Applications or System Console Window is unresponsive.	Check to see if two sessions of the same program are running.	Conduct a complete warm system reboot as indicated in paragraph 1-4 RDA/RPG Remote access terminal boot procedures above, closing ALL application windows using the <alt>X twice for each window. DO NOT fix this by simply closing one window, as the internal configuration has been changed.</alt>
pcANYWHERE is not in Waiting status.		Reload pcANYWHERE as indicated in paragraph 1-3 PCANYWHERE.

TOC

LOT

		PROD NAME 1 DS
		PRT MENII FILE
		DPR7L MDDE
DEL MENU FILE		DSPL NSG
		DSPL STATUS MENU
	END/SAVE ALL	PAGE
		BACK PAGE
	SIL AUD ALM	III
	PSTR CMND ON CMND LN	ONCL EDITS
	PROD NAME 8 IDS	PAS MENU
		MAIN NO
SHIFT	ALT	

Figure 1-3 Keyboard Mask

TOC

LOT

Table 1-1 Keyboard Function Key Description

Function Key Description

<f1></f1>	Displays Main menu
<f2></f2>	If Using Help with edit screen, redisplays edit screen. If using edit screen, exits edit screen. If menu is displayed, redisplays previous menu.
<f3></f3>	If command line is active, blanks command line. If using edit screen, exits edit screen.
<f4></f4>	Displays Help screens.
<f5></f5>	Page backward.
<f6></f6>	Page forward
<f7></f7>	Displays Status menu
<f8></f8>	Displays messages
<f9></f9>	Displays Load Shedding Categories menu
<f10></f10>	Switches to operational mode
<f11></f11>	Print screen
<f12></f12>	Displays ID and parameters help screen
<alt><f1></f1></alt>	Print screen
<alt><f2></f2></alt>	Displays ID and parameters help screen
<alt><f3></f3></alt>	Displays last entered command
<alt><f4></f4></alt>	Toggles audio alarm on and off
<alt><f5></f5></alt>	Undefined
<alt><f6></f6></alt>	END (saves edits and exits edit screens)
<alt><f7> - <shift><f12></f12></shift></f7></alt>	Undefined
<alt><f1> - <shift><f7></f7></shift></f1></alt>	Undefined
<shift><f8></f8></shift>	Clears print file
<shift><f9> - <shift><f12></f12></shift></f9></shift>	Undefined

TOC

LOT

Table 1-2 UCP CDT-100/RDA/RPG Remote Access Terminal Conversion Chart

# **UCP**

RDA/RPG Remote Access Terminal Keystrokes	CDT-100 Keystrokes	Comments
<f1><f12> <alt><f1><f12> <shift><f1><f12></f12></f1></shift></f12></f1></alt></f12></f1>	<f1><f12> <f11><f22> <f21><f32></f32></f21></f22></f11></f12></f1>	Use the new function key template for the UCP function keys.
<enter></enter>	<return></return>	Equivalent for command entry
<alt><tab></tab></alt>	<shift><port></port></shift>	Toggles between Systems Console and Applications Software. <alt><tab> is an alternative to the mouse for positioning.</tab></alt>
<alt>X <alt>X</alt></alt>	N/A	Properly exits the PC Passport Software.
<alt>U</alt>	<break></break>	Unlocks the keyboard
<alt>H</alt>	N/A	Allows you to get a help listing for PC Passport. Press <alt>H to toggle off the help listing.</alt>
<ctrl><break></break></ctrl>	<break></break>	Refreshes the screen. Also used after <alt>U for keyboard lockups. <ctrl><break> serves the same purpose as <break> used with the CDT-100.</break></break></ctrl></alt>
Mouse	N/A	The purpose of the mouse is to position the cursor. Can also be used to toggle settings in terminal setup mode.
<ctrl>S or <ctrl>Q</ctrl></ctrl>	<ctrl>S or <ctrl>Q</ctrl></ctrl>	Used to pause screen from scrolling and to start scrolling. (For Systems Console operations)
<alt>E</alt>	<line char="" delete=""></line>	Line delete character

TOC

LOT

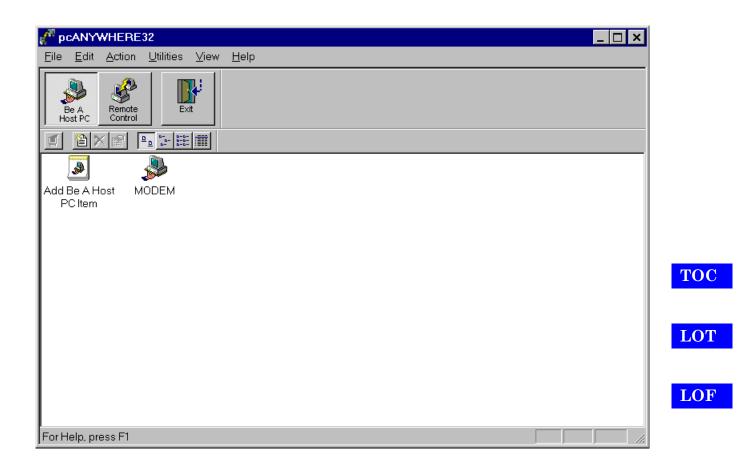


Figure 1-4. pcANYWHERE Main Menu

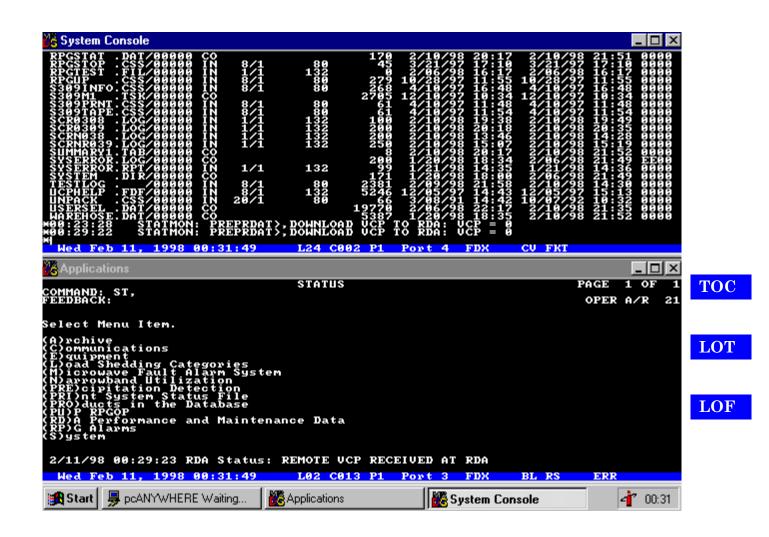


Figure 1-5 Split Screen Display in the UCP Position

# II. OPERATING THE TERMINAL

This chapter provides the information necessary for proper operation of the RDA/RPG Remote Access Terminal located in the UCP position or RDA MMI position, including key functions and a description of the message and status lines. This section is primarily for operators.

#### Note

This manual assumes that the user has had some experience with Windows 3.1 or higher. If the user is not familiar with such Windows terms as "dialog boxes," "icons," or "menus," read Microsoft's booklet for basic Windows information delivered with the RDA/RPG Remote Access Terminal equipment. The booklet is entitled "Windows 95".

This manual also assumes use of a right-handed mouse with the left button being the primary button. When instructed to click or to double click on an item, use the left button of the mouse. Directions will be provided to use the right mouse button when needed.

# TOC

#### 2-1 PHYSICAL FEATURES

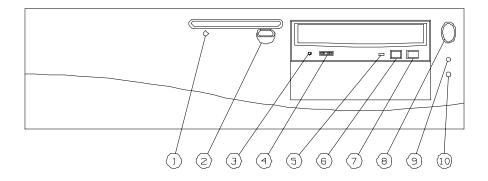
LOT

The RDA/RPG Remote Access Terminal consists of two basic pieces of equipment, the central Processing Unit (CPU) and the monitor. The CPU is a 166 MHz pentium processor supporting a 2.4 GB hard drive, a CD-ROM drive, and a 28.8 Kb modem. The monitor is a 14 inch SVGA monitor with sound system. The monitor provides a graphical display to make adjustment on selected options and is called the On Screen Display (OSO).



Figure 2-1 RDA/RPG Remote Access Terminal (CPU) Front PanelDesktop Rear Panel Components, and Figure 2-2 RDA/RPG Remote Access Terminal (CPU) Back Panel, identify the major physical features of the RDA/RPG Remote Access Terminal, which are discussed in the remaining sections.

Figure 2-3 RDA/RPG Remote Access Terminal Monitor Location and Function Controls and Table 2-1 On Screen Display Selection, identify the major physical features of the RDA/RPG Remote Access Terminal Monitor discussed in the remaining sections.



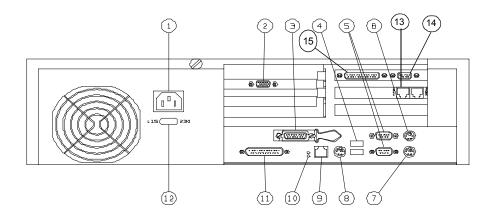
TOC

LOT

# **Desktop Front Panel Components**

Ref.	Component	Function
1	Diskette Drive Activity Light	Turns on when the diskette drive is reading or saving data.
2	Diskette Eject Button	Ejects a loaded diskette.
3	Stereo Headphone Jack	Connects headphones to the CD-ROM drive. (Not used)
4	Headphone Volume Control	Adjusts the volume of the CD-ROM drive. (Not used)
5	CD-ROM Drive Busy Indicator	Flashes amber when the drive is reading a CD.
6	CD-ROM Play/Skip Button	Press to start play or skip tracks.
7	CD-ROM Open/Close Button	Press to open or close the tray.
8	Dual-State Power Button	Turns the computer on and off.
9	Power-On Light	Turns on when power to the computer is turned on.
10	Hard Drive Activity Light	Turns on when the hard drive is reading or saving data.

Figure 2-1 RDA/RPG Remote Access Terminal (CPU) Front Panel



TOC

# Desktop Rear Panel Components

LOT

Ī	(	)	Ī	1	

Ref.	Connector	Function
1	Power Cord Connector	Connects the computer to an electrical power outlet.
2	Monitor Connector	Connects a monitor.
3	Ethernet AUI Connector	Connects the Ethernet network, using an AUI cable or an AUI to BNC transceiver. (Not used)
4	Universal Serial Bus (USB) Connectors	Connects the computer to any USB peripheral while the computer is operating. (Not used)
5	Serial Connectors	Connects a serial device, such as a serial mouse or a scanner. (Not used)
6	Mouse Connector	Connects the mouse. (Green-colored icon)
7	Keyboard Connector	Connects the keyboard. (Orange-colored icon)
8	External Infrared Transceiver	Connects an optional external infrared transceiver. (Not used)
9	Ethernet RJ-45 Connector	Connects the Ethernet network, using RJ-45 cable. (Not used)
10	Network Status Lights	Yellow link light turns on when network driver is properly loaded and system is physically connected to a network. Green activity light turns on when system detects network activity. (Not used)
11	Parallel Port Connector	Connects a parallel device, such as a parallel printer. (Not used)
12	Voltage Select Switch	Switches voltage between $115\mathrm{V}$ (U.S.) and $230\mathrm{V}$ to match geographical requirements.
13	Modem Port (Telco) Connector	Connects the modem, using RJ-11 cable.
14	COMM Port 3 Connector	Connects COMM3 using a serial adapter.
15	COMM Port 4 Connector	Connects COMM4 using a null modem.

Figure 2-2 RDA/RPG Remote Access Terminal (CPU) Back Panel

*Power ON/OFF switch:* Used to turn the monitor ON and OFF. If the monitor is in stand-by mode, indicated by an amber color Power Indicator, push the Power Button again to return the monitor to its normal display operation.

Power Indicator: Indicator lights up green when the monitor operates normally. If the monitor is in Display Power Management (DPM) (Energy Saving) mode (stand-by/suspend/power off), this indicator color changes to amber.

#### 2-2 MONITOR CONTROL PANEL FUNCTIONS AND CONTROLS

The monitor supplied with the RDA/RPG Remote Access Terminal uses a feature called the On Screen Display (OSD) to change settings related to the display or to the monitor's internal sound system (Sound not used). OSD provides the user a group of buttons on the monitor's front panel (see Figure 2-3 RDA/RPG Remote Access Terminal Monitor Location and Function Controls) to make selections and adjustments (i.e., image size, position, etc.). These control panel function buttons are:

Control Panel Function - Enter button: Used to se

Used to start/enter the OSD. If there is no

OSD on the screen, one press of this button will show the ODS Main Menu. If no actions are made within the defined OSD time display limit (selectable with 5 seconds minimum, 60 seconds maximum), the menu will automatically go away.

LOT

TOC

Control Panel Function - Adjustment control: The left and right arrow button are used for selecting (highlighting) an OSD icon. These buttons are also used for selecting the level of the selected item. Table 2-1 On Screen Display Selection, gives a complete description of available options and possible adjustments.

LOF

Control Panel Function - Sound: To adjust sound menu. (Not applicable)

Control Panel Function - Sound Mute: Used to select mute on (means sound off) and mute off (means sound on). (Not applicable)

The following is a description of the other controls available on the monitor:

*Contrast Adjustment control*: Used to adjust the display to the contrast desired. Move the thumb wheel located beneath this indicator to increase or decrease the display contrast.

*Brightness Adjustment control*: Used to adjust the brightness of the screen. Move the thumb wheel located beneath this indicator to increase or decrease the display brightness.

MIC: Built-in microphone. (Not applicable)

#### 2-3 USING THE MONITOR ON SCREEN DISPLAY

OSD can be used at any time, with changes saved automatically once a change is made. To use OSD,

simply press the button on the left front side of the monitor to begin monitor display adjustments. Use the adjustment controls to highlight the symbol desired to change. Then press the

button again once the symbol associated with a specific change is shown. Then make the adjustment using the adjustment controls. For guidance on making changes use Table 2-1 On Screen Display Selection.

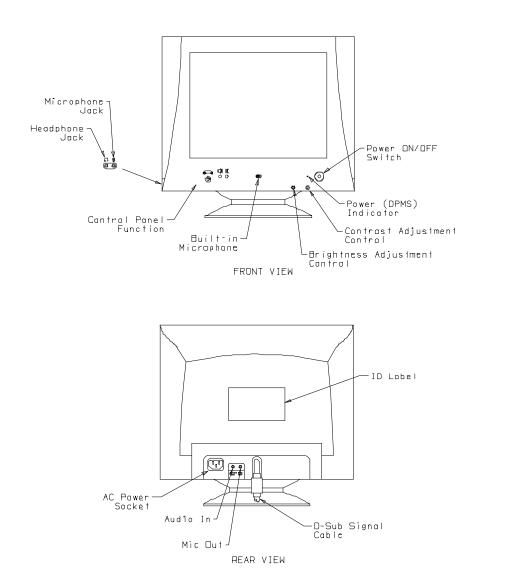


Figure 2-3 RDA/RPG Remote Access Terminal Monitor Location and Function Controls

TOC

LOT

Table 2-1 On Screen Display Selection

Symbol	Description
Horizontal Position	Moves picture image left and right.  Moves the screen image left.  Moves the screen image right.
Horizontal Size	Adjusts image width.  Decreases the size of the screen image.  Increases the size of the screen image.
Vertical Position	Moves image up and down.  Moves the screen image up. Moves the screen image down.
Vertical Size	Adjusts image height.  Decreases the size of the screen image.  Increases the size of the screen image.
Side Pincushion	Corrects the bowing in and out of the image.  Curves the image's edges inwards.  Curves the image's edges outwards.
Trapezoid	Corrects geometric distortion.  Makes the screen image narrower at the top.  Makes the screen image wider at the top.
Tilt	Corrects image rotation.  Tilts the screen image left.  Tilts the screen image right.
Zoom Adjust	Adjusts Horizontal and Vertical image size simultaneously.  Makes the image size smaller.  Makes the image size bigger.
Mode Recall	If the monitor is operating in a factory preset mode, this control will reset the image to the factory preset mode. No effect in user mode.
Degauss	Used to demagnetize the picture to give a move accurate image and color.
Color Select	Selects color temperature, 9300° K/ 7200° K/ user.  Decreases the amount of color in the image.  Increases the amount of color in the image.
OSD Adjust	Corrects OSD image's Horizontal position and Vertical position.  Moves the horizontal position.  Moves the vertical position.
OSD Time	Selects OSD display time (seconds).
Language Select	Chooses the language in which the control names are displayed.
Mode Information	Informs users of preset and user mode data.
Exit	Disappears the OSD on the screen.

TOC

LOT

#### 2-4 SOUND SELECTION AND ADJUSTMENT

Although the monitor contains speakers and the OSD System allows for sound selection and adjustment, a sound card is not included with the equipment. OSD procedures for volume, treble, bass, balance, and microphone setting changes have no effect on operations.

#### 2-5 POWERING ON THE TERMINAL

Power up the CPU terminal by pressing the power switch located on the right upper corner of the front of the CPU terminal (See Figure 2-1 RDA/RPG Remote Access Terminal (CPU) Front PanelDesktop Rear Panel Components) to the "ON" position. Next, power up the monitor by pressing the power switch (located on the lower right hand corner of the front of the monitor). Note that the power light on the monitor will transition from amber to green. In a few moments, the display screen appears and the terminal is ready for operations.

If the terminal fails to power up, check the AC power toggle switch, the power connection to the surge suppressor, and the connection to the power outlet being used. See Table 2-3 Operator Troubleshooting, for basic troubleshooting if power is available to the terminal and monitor, but there is no display on the screen.

# TOC

#### 2-6 TERMINAL ADJUSTMENT

Your terminal includes several adjustable features to offer maximum user comfort. See the following sections for information on adjusting your terminal.

# LOT

#### 2-6.1 Monitor

The monitor has a forward and backward tilt range from the vertical position and a swivel capability from left to right.



To adjust the viewing angle of your monitor, follow the procedure below.

- Tilt Down: Grasp lower corner of display, and push down.
- Tilt Up: Grasp lower corner of display and pull upward.
- Swivel: Grasp lower corner of display and turn left or right to position the terminal to a comfortable viewing angle.

#### 2-6.2 Screen Brightness and Contrast Control

Controls located in front of your monitor enable you to adjust screen brightness and contrast. Refer to Figure 2-3 RDA/RPG Remote Access Terminal Monitor Location and Function Controls, to locate the brightness and contrast controls. (Refer to Chapter II. OPERATING THE TERMINAL paragraph 2 for additional information.)

#### 2-6.3 Keyboard

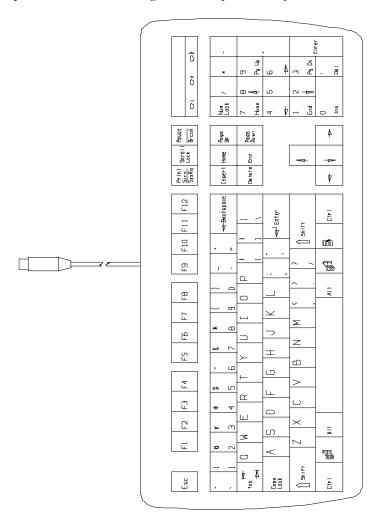
The keyboard provides two possible height settings for your comfort. Raise the height of the keyboard by lifting the plastic feet at the back of the keyboard. Lower the keyboard by returning the plastic feet to their original position.

## 2-6.4 Setup Configuration Adjustments:

No adjustments of other attributes of the terminal with the inverse video, display status lines, ring bell, etc. options are recommended. For security reasons, the setup configuration mode is a maintenance function.

## 2-7 KEYBOARD LAYOUT

The layout of the keyboard is shown in Figure 2-4 Keyboard Layout.



TOC

LOT

Figure 2-4 Keyboard Layout

#### 2-7.1 Auto Repeat Function

Any key pressed for a minimum of one second causes a continuous stream of the same character to be repeated at a rate of 15 characters per second until that key is released. The following keys ARE NOT included in the auto-repeat feature:

- <Caps Lock>
- General Function Keys <F1>-<F12>
- <Ctrl>
- <Insert><Delete>
- <Home><End>
- <PgUp><PgDn>
- <Break>
- <Shift><Alt>

#### 2-7.2 Using the General Function Keys

The terminal contains 12 (shiftable to 32 unique functions) general function keys for transmission to the host computer. The function keys are shown shaded in Figure 2-5 General Function Key Group. The general function keys are defined for the RDA/RPG Remote Access Terminal in Table 2-2, UCP Terminal Function Keys for RDA/RPG Remote Access Terminals.

TOC

LOT



# LOT



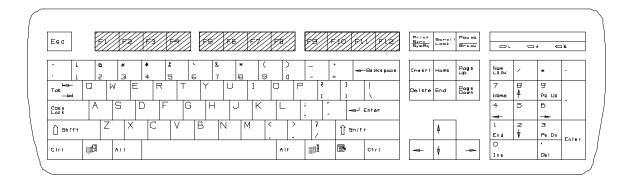


Figure 2-5 General Function Key Group

# Table 2-2 UCP Terminal Function Keys for RDA/RPG Remote Access Terminals

Function Key

Description

<f1></f1>	Displays Main menu
<f2></f2>	If Using Help with edit screen, redisplays edit screen. If using edit screen, exits edit screen. If menu is displayed, redisplays previous menu.
<f3></f3>	If using edit screen, cancels edits.
<f4></f4>	Displays Help screens.
<f5></f5>	Page backward.
<f6></f6>	Page forward
<f7></f7>	Displays Status menu
<f8></f8>	Displays messages
<f9></f9>	Displays Load Shedding Categories menu
<f10></f10>	Switches to operational mode
<f11></f11>	Print screen
<f12></f12>	Displays Product ID and parameters help screen
<alt><f1></f1></alt>	Print screen (Same as <f11>)</f11>
<alt><f2></f2></alt>	Displays ID and parameters help screen (Same as <f12>)</f12>
<alt><f3></f3></alt>	Displays last entered command
<alt><f4></f4></alt>	Toggles audio alarm on and off
<alt><f5></f5></alt>	Undefined
<alt><f6></f6></alt>	END (saves edits and exits edit screens)
<alt><f7> - <alt><f12></f12></alt></f7></alt>	Undefined
<shift><f1> - <shift><f7></f7></shift></f1></shift>	Undefined
<shift><f8></f8></shift>	Clears print file
<shift><f9> - <shift><f12></f12></shift></f9></shift>	Undefined

TOC

LOT

# 2-8 COMMON KEYSTROKES START-UP, SHUTDOWN AND RECOVERY METHODS.

The following quick reference sheets are provided for common keystroke needs:

## UCP CDT-100/RDA/RPG Remote Access Terminal Conversion Chart

RDA/RPG Remote Access Terminal Keystrokes	CDT-100 Keystrokes	Comments	
<pre><f1><f12></f12></f1></pre>		Use the new function key template for the UCP function keys.	
<enter></enter>	<return></return>	Equivalent for command entry	
<alt><tab></tab></alt>	<shift><port></port></shift>	Toggles between Systems Console and Applications Software. <a href="Alt&gt;&lt;Tab">ab</a> is an alternative to the mouse for positioning.  Press once; do not hold the <a href="Alt&gt;&lt;Tab">Alt&gt;<tab< a="">&gt; keys down.</tab<></a>	
<alt>X <alt>X</alt></alt>	N/A	Properly exits the PC Passport Software.	
<alt>U</alt>	<break></break>	Unlocks the keyboard	
<alt>H</alt>	N/A	Allows you to get a help listing for PC Passport. Press <b><alt>H</alt></b> to toggle off the help listing.	
<ctrl><break></break></ctrl>	<break></break>	Refreshes the screen. Also used after <alt>U for keyboard lockups. <ctrl><break> serves the same purpose as <break> used with the CDT-100.</break></break></ctrl></alt>	
Mouse	N/A	The purpose of the mouse is to position the cursor.	
<ctrl>S or <ctrl>Q</ctrl></ctrl>	<ctrl>S or <ctrl>Q</ctrl></ctrl>	Used to pause screen from scrolling and to start scrolling. (For Systems Console operations)	
<alt>E</alt>	<line delete<br="">Char&gt;</line>	Line delete character	

TOC

LOT

Indication/Response

# RDA/RPG REMOTE ACCESS TERMINAL STARTUP PROCEDURES

#### Note

The terminal contains two program *objects* (icons) called Applications and System Console. They are accessed by following the **Start**, **Programs**, **Start-up** menu tree from the taskbar. Since they are *program objects* and not actual programs on the hard drive, you can not access them directly from the desktop or from a DOS prompt.

Step

Equipment/Location

Action/Procedure

<u>осер</u>	<u>nqarpment nocation</u>	<u> 110010111 1 1 0 0 0 0 0 1 0 0 0 0 0 0 </u>	<u> </u>		
1 2	RDA/RPG Remote Access Terminal (CPU) RDA/RPG Remote Access Terminal monitor	Set Power Switch to ON Set Power Switch to ON	POWER ON indicator on CPU illuminates POWER ON indicator on monitor illuminates		
<b>Note</b> If the RDA/RPG Remote Access Terminal comes up active with Applications Software running, do not proceed to step 3. The terminal is ready to operate.					
3	RDA/RPG Remote Access Terminal (System Console)	a. If CDS> prompt is not observed, press <b><enter></enter></b> until CDS> prompt appears.	CDS> prompt appears on screen.		
		b. Enter <b>KEY 1</b> , password			
		c. Enter <b>PO ON</b>	Powers up the RPG.		
		d. Press <b><enter></enter></b> .	"*" prompt appears on Screen.		

#### Note

Sometimes it will be necessary to Wake Up the terminal after restarting it. If you are using the Applications terminal, press <Ctrl><Break> or <F1>. If you are using the Systems Console, press <Enter> a few times until your \* or CDS> prompt is displayed. If you are going to reboot the RDA/RPG Remote Access Terminal (CPU), close both terminals in the appropriate manner (i.e. press <Alt>X twice) and then close pcANYWHERE in the normal manner (i.e. click on the x box and Cancel), and then close Windows by performing a Shutdown (Start, Shutdown, Restart, Yes.)

LOI

TOC

# RDA/RPG REMOTE ACCESS TERMINAL SHUTDOWN PROCEDURES

#### Note

This procedure is used to shutdown the terminal. This doesn't shutdown the RDA or the RPG.

Step 1	Equipment/Location At the PC (in Applications Software) RDA/RPG Remote Access Terminal (Applications window)	Action/Procedure Press <alt>X twice</alt>	Indication/Response Exit Applications SW
2	At the PC (in Systems Console mode) RDA/RPG Remote Access Terminal (Systems Console window)	Press <b><alt>X</alt></b> twice	Exit Systems Console
3	At the pcANYWHERE Waiting button on the Windows 95 tool bar	Select pcANYWHERE Waiting and Select Cance	Cancel pcANYWHERE
4	At the Main Menu	Select Start and Shutdown Choose to Shutdown the Computer	Shutdown Windows 95 PC Power On indica tor goes of and monitor Power ON indicator turns red.
5	At the RDA/RPG Remote Access Terminal Monitor	Set Power Switch to <b>OFF</b>	Power ON indicator on monitor goes off

TOC

LOI

## **CAUTION**

#### **Emergency Termination**

The system is set up to start all three software programs (pcANYWHERE, PC-Passport and Windows 95) after a reboot. If either Applications Software of System Console is locked, press <Alt>U to unlock the keyboard followed by <Alt>X, twice to properly close the software. If <Alt>U does not unlock the keyboard, press <Ctrl><Break>. If neither of these methods unlocks the keyboard, use the mouse to close the Window. This is an <u>abnormal shutdown</u> of Applications Software and System Console running under PC-Passport, and the remaining software will need to be closed and the machine restarted.

If Windows 95 should fail to do an orderly shutdown, as a last resort press the PC <u>reset</u> button or cycle the PC power. This will reboot the RDA/RPG Remote Access Terminal and restart the programs. However, every attempt should be made to close all of the software down first, before performing an emergency termination. This includes pcANYWHERE, Applications Software, System Console running under PC-Passport, and Windows 95.

#### Note

If you are going to reboot the RDA/RPG Remote Access Terminal, close both terminals in this manner and then close pcANYWHERE in the normal Windows manner before performing a Shutdown (**Start**, **Shutdown**, **Restart**, **Yes**.)

#### 2-9 MESSAGES AND STATUS LINES

The terminal displays status information on line 25 of your display. This is called the status line. If there is an error condition present in the terminal, it automatically causes the status line to replace either message line. The message line returns after the error condition is corrected.

If an error message is received on the status line, press **Ctrl> Break>** to clear the error and resume normal operations. If repeated error messages occur, maintenance action may be required to reconfigure the terminal setup.

#### 2-10 MOUSE SUPPORT

Moving the mouse produces an immediate response when using the terminal software. In System Console or Application Software mode, when the mouse is moved, the normal status line display is replaced with a message defining the options available and the mouse cursor appears. The mouse cursor and the status line message disappear when a key is pressed on the keyboard and when data is being received from the host computer (RDA or RPG). Mouse actions, other than repositioning between Systems Console and Applications Software, prevent data entry from the keyboard when in System Console or Application Software mode. When the mouse action ends, normal communication with the keyboard resumes.

TOC

#### 2-11 TROUBLESHOOTING

Basic user troubleshooting can resolve most of the common problems encountered.

LOT

If the operator is unable to resolve any problems after referring to Table 2-3 Operator Troubleshooting, maintenance action is required.

LOF

#### 2-12 PROTECTING THE HARDWARE AND SOFTWARE FROM DAMAGE

Proper operation protects the terminal hardware and software from damage. The following list is provided to summarize important methods to protect your equipment and to prevent unnecessary downtime:

- 1. Do not use any software (disks or CD-ROMs) that have not be provided to you by the OSF for specific use with the RDA/RPG Remote Access Terminal.
- 2. If it is necessary to power down the terminal, close the software as instructed in the shut-down procedures. This is critical. If the terminal is repeatedly shutdown without properly closing the software, damage to all software components is likely to occur.
- 3. Do not reconfigure the software. Remote access, maintenance support, and RDA and RPG availability and security are jeopardized if any unauthorized software settings are made.
- 4. Do not force any control buttons that do not respond to normal pressure. Maintenance action is required.
- 5. If power is to be removed from the RDA/RPG Remote Access Terminal, close the software properly and perform normal shutdown procedures before power is removed. This statement does not apply to utility/generator power switches at the RDA.

Table 2-3 Operator Troubleshooting

No	Symptom	Possible Cause	Solution
1	No power at all	No AC input	Turn surge suppressor on. Check outlet connection
2	No power to terminal- Amber light on monitor	No AC input	Power on terminal
3	No power to monitor- Green light on terminal	No AC input	Power on monitor
4	No keyboard response	Keyboard not connected	Connect keyboard cable to terminal keyboard port (Reference Figure 2-2 RDA/RPG Remote Access Terminal (CPU) Back Panel)
5	No mouse response	Mouse not connected	Connect mouse cable to terminal mouse port (Reference Figure 2-2 RDA/RPG Remote Access Terminal (CPU) Back Panel) Maintenance may be required. If the mouse cable has been disconnected, it must be reconnected, then the software must be properly closed, the terminal shutdown and the software restarted.
6	Terminal not communicating with host computer	Terminal not configured properly	Maintenance action required
7	Message garbled	Out of synchronization	Press <ctrl> and <break> keys to resync</break></ctrl>
8	Printer does not work	Incorrect settings or bad cable	Check cable connection. Verify printer has power
9	All letters capitalized	Lock key pressed	Release Lock key
10	Control codes from the keyboard do not work	Incorrect key sequence	Ensure the control key is held down while pressing the next key
11	Function keys do not work properly	Incorrect setup configuration	Maintenance action required
12	Unable to dial in	PcANYWHERE software is not loaded or is not in waiting mode.	Reload the PcANYWHERE software.

TOC

LOT

# III. MAINTAINING THE TERMINAL

The purpose of this chapter is to provide the necessary information for proper maintenance of the RDA/RPG Remote Access Terminal in either the UCP position or the RDA MMI position. This chapter is designed for maintenance personnel. This chapter also provides information for using the remote access capabilities.

The RDA/RPG Remote Access Terminal is delivered to the site as a total package which includes all hardware with the software preloaded. All software is also provided on CD-ROM and floppy disk in the event a hard disk failure occurs. The hardware consists of a 166 MHz processor, a color monitor, a 2.4 GB EIDE hard drive, a 16 MB RAM, an internal 28.8 Sportster type modem, an internal 16X CD ROM drive, a 3 ½" (1.44 MB) diskette drive, an external surge suppressor for power and telecommunications, and a dual ISA controller with high interrupts to communicate with the RDASC or RPG via existing RS-232 System Console and Application Terminal interfaces. The software consists of Windows 95, PcAnywhere and PC Passport. PcAnywhere is the communications software package used for remote access. PC Passport is a concurrent emulator software package. PC Passport is a DOS based program run on a normal Windows 95 PC.

#### Note

This chapter as well as the entire manual assumes that the user has had some experience with Windows 3.1 or higher. If the user is not familiar with such Windows terms as "dialog boxes," "icons," or "menus," read Microsoft's booklet for basic Windows information delivered with the RDA/RPG Remote Access Terminal equipment. The booklet is entitled "Windows 95".

This manual also assumes use of a right-handed mouse with the left button being the primary button. When instructed to click or to double click on an item, use the left button of the mouse. Directions will be provided to use the right mouse button when needed.

If the RDA/RPG Remote Access Terminal is powered down and restarted an occurrence alarm will be displayed. The RDA MMI I/O status fault is normal. If the RDA Status and Control Computer (RDASC) can not talk to the RDA/RPG Remote Access Terminal this fault occurs.

## WARNING

Become familiar with your new equipment and this user's manual. As a safety precaution, close pcANYWHERE software before performing any RPG or RDA maintenance. This will ensure that no remote operations can be performed simultaneously with maintenance procedures. To close pcANYWHERE prior to any RPG or RDA maintenance, perform the following steps:

- 1. Select **pcANYWHERE Waiting** on the Windows 95 Tool Bar.
- 2. Select **Cancel pcANYWHERE** and if necessary press the **Exit** button on the pcANY-WHERE main menu.
- 3. Select **Exit**.
- 4. Verify that pcanywhere waiting is no longer on the Windows 95 Tool Bar.
- 5. Perform maintenance as required.

TOC

LOT

#### Note

After completion of the maintenance procedure and restarting the RDA or RPG, it is critical to re-initialize pcANY-WHERE software. pcANYWHERE must be returned to a waiting mode so that if remote access is needed, a user can dial in. To re-initialize pcANYWHERE following any RPG or RDA maintenance perform the steps listed below:

- 1. At the Windows 95 Tool Bar select **Start**, **Programs**, **pcANYWHERE32**, **pcANY-WHERE**.
- 2. Select **Be a Host PC**.
- 3. Double click on **Modem** to re-initialize the modem. This will also minimize the pcANYWHERE software.
- 4. Verify that the Windows 95 Tool Bar has a pcANYWHERE window waiting for a call.
- 5. The RDA/RPG Remote Access Terminal is now ready for a call. It is important not to have more than one task of pcANYWHERE running at any time.

TOC

LOT

#### 3-1 SITE SELECTION FOR RDA/RPG REMOTE ACCESS TERMINAL IN THE UCP POSITION

The terminal is used in any typical office environment. Allow ample time for the terminal monitor and keyboard to adjust to the temperature change when moving it to a warmer environment. The environment change could produce internal condensation and affect the terminal operation. Ensure that the local floor covering does not produce electrostatic charges that may impair the operation of the terminal.

LOF

## 3-1.1 Electrical Requirements

The terminal operates with voltages ranging from 90 to 132 VAC. The monitor operates with voltages from 100 to 240 VAC with a surge tolerant power supply.

#### 3-1.2 Interface Requirements

Several communication ports are available including two serial ports RS-232-C ports, (one 9 dB COMM3 and one 25 dB COMM4 on the internal I/O controller), a parallel printer port, and a modular RJ11 Telco port off the U.S. Robotics Internal Sportster Modem.

#### Note

Both COMM3 and COMM4 are used for communication with the host computer. For the UCP located host terminal COMM3 interfaces with the Application Software. For the RDA MMI located host terminal COMM3 interfaces with the Systems Console. COMM4 is used to interface the System Console for the UCP located host terminal. COMM4 is used to interface the Application Software for the RDA MMI located host terminal. Reference Table 3-1 COMM3 Pinouts, Table 3-2 COMM4 Pinouts.

The CPU monitor connection (port) is used connect the CPU with the monitor cable. Reference Table 3-4 Monitor Pinouts, for monitor connector (port) pinouts.

Keyboard and mouse connectors are used to interface the keyboard and mouse to the terminal, and to control terminal operations. Reference Table 3-5 Keyboard Pinouts, and Table 3-6 Mouse Pinouts, for the keyboard and mouse connector (port) pinouts. Not all signals are used for Concurrent to RDA/RPG Remote Access Terminal interfacing.

Table 3-1 COMM3 Pinouts

# Serial (COMM3)

Pin	Signal
1	Carrier Detect
2	Receive Data
3	Transmit Data
4	Data Terminal Ready
5	Ground
6	Data Set Ready
7	Request to Send
8	Clear to Send
9	Ring Indicator

TOC

LOT

## Table 3-2 COMM4 Pinouts

# Serial (COMM4)

Pin	Signal
1	Ground
2	Transmit Data
3	Receive Data
4	Request to Send
5	Clear to Send
6	Data Set Ready
7	Signal Ground / Common Return
8	Receive Line Signal Detector
9	+ Voltage
10	- Voltage
11	Not Used
12	Secondary Received Line Signal
13	Secondary Clear to Send
14	Secondary Transmitted Data
15	DTE Transmitter Signal Element Timing
16	Secondary Received Data
17	Receiver Signal Element Timing
18	Not Used
19	Secondary Request to Send
20	Data Terminal Ready
21	Signal Quality Detector
22	Ring Indicator
23	Data Signal Rate Selector
24	DTE Transmitter Signal Element Timing
25	Not Used

Table 3-3 Parallel Pinouts (LPT1)

## Parallel

Pin	Signal
1	Strobe
2	Data Bit 0
3	Data Bit 1
4	Data Bit 2
5	Data Bit 3
6	Data Bit 4
7	Data Bit 5
8	Data Bit 6
9	Data Bit 7
10	Acknowledge
11	Busy
12	Paper End
13	Select
14	Auto Line Feed
15	Error
16	Initialize
17	Printer
18	Select In
19	Signal ground
20	Signal ground
21	Signal ground
22	Signal ground
23	Signal ground
24	Signal ground
25	Signal ground

TOC

LOT

## Table 3-4 Monitor Pinouts

## Monitor

Pin	Signal
1	Red
2	Green
3	Blue
4	Not Used
5	Ground
6	Red Return
7	Green Return
8	Blue return
9	Optimal +5 volts
10	Ground
11	Not Used
12	SDA
13	Horiz. Sync
14	Vert. Sync.
15	SCL (for DDC channel)

Table 3-5 Keyboard Pinouts

Enhanced Keyboard (orange-colored icon)

Pin	Signal
1	Data
2	Not Used
3	Ground
4	+5V
5	Clock
6	Not Used

TOC

LOT

Table 3-6 Mouse Pinouts

Pointing Device (Mouse, green-colored, icon)

Pin	Signal
1	Data
2	Not Used
3	Ground
4	+5V
5	Clock
6	Not Used

#### 3-2 TERMINAL CONNECTION

The following sections describe the different cable configurations of the RDA/RPG Remote Access Terminal. Table 3-7 UCP Cable Configuration, Table 3-8 RDA Cable Configurations, Table 3-11 UCP CDT-100 / RDA/RPG Remote Access Terminal Conversion Chart, and Table 3-12 RDA MMI CDT-100/RDA/RPG Remote Access Terminal Conversion Chart identify the cabling interfaces to the connectors on the rear of the terminal, according to site specific configurations. To identify the correct cable and connectors, locate your site's configuration, then refer to the UCP and the RDA MMI Cable Configuration Tables to reflect the original cabling and the new cabling. Reference Figure 3-1 Adapter Connection, for the adapter connection.

TOC

LOT

Table 3-7 UCP Cable Configuration

UCP CONFIGURA- TION		CABLE "FROM" END	CENTER	CABLE "TO" END	COMM PORT	SERIAL ADAPTER/ NULL MODEM	
202	REMARK CABLE FROM	W222 P1(26CH2)	W222 56232ASSY1214871-301	W222 P2(24SES1-EIA)	N/A	N/A	
302 AND 311	ТО	W900 P1(26CH2)	W900 56232ASSY1214871-327	W900 P2(34CP1)	3	SERIAL	
	REMARK CABLE FROM	W223 P1(26CH1)	W223 56232ASSY1214871-302	W223 P2(24SES2-AUX)	N/A	N/A	
	ТО	W901 P1(26CH1)	W901 56232ASSY1214871-328	W901 P2(34A12)	4	NULL	TOC
	REMARK CABLE FROM	W237 P1(33-C2)	W237 56232ASSY1214871-314	W237 P2(24SES1-EIA)	N/A	N/A	LOT
307	ТО	W903 P1(33-C2)	W903 56232ASSY1214871-329	W903 P2(34CP1)	3	SERIAL	
	REMARK CABLE FROM	W238 P1(33-C1)	W238 56232ASSY1223381-303	W238 P2(24SES2-AUX)	N/A	N/A	LOF
	ТО	W904 P1(33-C1)	W904 56232ASSY1223381-307	W904 P2(34A12)	4	NULL	
	REMARK CABLE FROM	34W2 P1(34A1DTE)	34W2 56232ASSY1218795-301	34W2 P2(24SES1-EIA)	N/A	N/A	
310	ТО	34W900 P1(34A1DTE)	34W900 56232ASSY1218795-304	34W900 P2(34CP1)	3	SERIAL	
	REMARK CABLE FROM	34W3 P1(34A2DTE)	34W3 56232ASSY1218795-302	34W3 P2(24SES2-AUX)	N/A	N/A	
	ТО	34W901 P1(34A2DTE)	34W901 56232ASSY1218795-305	34W901 P2(34A12)	4	NULL	

## SITE LISTING

	SHE LISTING	
302 EGLIN AFB (NORTHWEST FL), FL	302 FREDERICK, OK (ALTUS)	302 KEESLER AFB, MS
307 KC BANNISTER MNTC, MO	310 ABERDEEN, SD	310 ALBANY, NY
310 ALBUQUERQUE, NM	310 ALPENA, MI	310 AMARILLO, TX
310 ATLANTA (BEAR CREEK ARP), GA	310 AUSTIN/SAN ANTONIO, TX	310 BILLINGS, MT
310 BINGHAMTON, NY	310 BIRMINGHAM (SHELBY ARP), AL	310 BISMARCK, ND
310 BOISE (WILD HORSE CORRAL), ID	310 BOSTON, MA	310 BROOKHAVEN, NY
310 BROWNSVILLE, TX	310 BUFFALO, NY	310 BURLINGTON, VT
310 CENTRAL (SPRINGFIELD), IL	310 CHARLESTON, SC	310 CHARLESTON, WV
310 CHEYENNE, WY	310 CHICAGO, IL	310 CINCINNATI/DAYTON, OH
310 CLEVELAND, OH	310 COLUMBIA, SC	310 CORPUS CHRISTI, TX
310 DALLAS/FT WORTH, TX	310 DENVER (FRONT RANGE), CO	310 DES MOINES, IA
310 DETROIT (SELFRIDGE), MI	310 DODGE CITY, KS	310 DULUTH, MN
310 EL PASO (SANTA TERESA), TX	310 EUREKA (BUNKER HILL), CA	310 FARGO/GRAND FORKS, ND
310 GLASGOW, MT	310 GOODLAND, KS	310 GRAND ISLAND, NE
310 GRAND RAPIDS, MI	310 GREAT FALLS, MT	310 GREEN BAY, WI
310 GREER, SC	310 HOUSTON/GALVESTON, TX	310 INDIANAPOLIS, IN
310 JACKSON, KY	310 JACKSON, MS	310 JACKSONVILLE, FL
310 KANSAS CITY (PLEASANT HILL),MO	310 KC BANNISTER MNTC, MO	310 KNOXVILLE (MORRISTOWN), TN
310 LA CROSSE, WI	310 LAKE CHARLES, LA	310 LANDER (RIVERTON), WY
310 LAS VEGAS (NELSON), NV	310 LITTLE ROCK, AR	310 LORING AFB, ME
310 LOS ANGELES (SLPR MT), CA	310 LOUISVILLE (FT. KNOX), KY	310 LUBBOCK, TX
310 MARQUETTE, MI	310 MELBOURNE, FL	310 MEMPHIS (MILLINGTON), TN
310 MIAMI, FL	310 MILWAUKEE, WI	310 MINNEAPOLIS/ST. PAUL, MN
310 MOBILE, AL	310 MOREHEAD CITY, NC	310 NASHVILLE (OLD HICKORY), TN
310 NORFOLK/RICHMOND, VA	310 NORTH PLATTE, NE	310 NWS TRAINING CENTER KC, MO
310 ODESSA/MIDLAND, TX	310 OKLAHOMA CITY, OK	310 OMAHA (MEAD), NE
310 OSF-REDUNDANT, OK	310 PADUCAH, KY	310 PENDLETON, OR
310 PHILADELPHIA, PA	310 PHOENIX (WILLIAMS), AZ	310 PITTSBURG, PA
310 POCATELLO, ID	310 PORTLAND, ME	310 PORTLAND, OR
310 PUEBLO, CO	310 QUAD CITY (DAVENPORT), IA	310 RALEIGH/DURHAM, NC
310 RAPID CITY, SD	310 ROANOKE (SIMPSONS), VA	310 SACRAMENTO VALLEY, CA
310 SAN ANGELO, TX	310 SAN DIEGO (MIRAMAR), CA	310 SAN FRANCISCO BAY AREA, CA
310 SAN JOAQUIN VALLEY, CA	310 SANTA ANA MOUNTAINS, CA	310 SEATTLE, WA
310 SHREVEPORT, LA	310 SIOUX FALLS, SD	310 SLIDELL, LA
310 SPOKANE, WA	310 SPRINGFIELD, MO	310 ST. LOUIS, MO

TOC

LOT

310 STATE COLLEGE, PA	310 TALLAHASSEE, FL	310 TAMPA BAY AREA, FL
310 TOPEKA (WABAUNSEE), KS	310 TUCSON (SANUARITA), AZ	310 TULSA (INOLA), OK
310 WASHINGTON (STERLING), DC	310 WICHITA, KS	310 WILMINGTON, NC
310 NORTHEAST ALABAMA	310 WESTERN ARKANSAS	310 NORTHERN INDIANA
311 ANDERSON AFB, GUAM	311 BEALE AFB, CA	311 CAMP HUMPHREYS, ROK
311 CANNON AFB, NM	311 CENTRAL TEXAS, TX (FT HOOD)	311 COLUMBUS AFB, MS
311 DOVER AFB, DE	311 DYESS AFB, TX	311 EDWARDS AFB, CA
311 FT CAMPBELL, KY	311 FT RUCKER, AL	311 FT. POLK, LA
311 FT. DRUM (GRIFFISS AFB), NY	311 HOLLOMAN AFB, NM	311 KADENA AB, OKI
311 KEESLER AFB, MS	311 KEESLER AFB, MS	311 KEY WEST, FL
311 KUNSAN AB, ROK	311 LAJES AB, AZS	311 LAUGHLIN AFB, TX
311 MAXWELL AFB (EASTERN AL), AL	311 MINOT AFB, ND	311 MOODY AFB, GA
311 ROBINS AFB, GA	311 VANCE AFB, OK	311 VANDENBURG AFB, CA
N/A NSSL	N/A OSF (OPEN SYSTEMS)	

TOC

LOT

Table 3-8 RDA Cable Configurations

RDA (12 FIGURA	221821) CON- XTION	CABLE "FROM" END	CENTER	CABLE "TO" END	COMM PORT	SERIAL ADAPTER/ NULL MODEM	
	REMARK CABLE FROM	5/105W632 P1(A16J0)	5/105W632 56232ASSY1214756-301	5/105W632 P2(A4SES1-EIA)	N/A	N/A	
301 AND 306	ТО	5/105W900 P1(A16J0)	5/105W900 56232ASSY1214756-304	5/105W900 P2(CP1)	3	SERIAL	
	REMARK CABLE FROM	5/105W638 P1(A16J1)	5/105W638 56232ASSY1214756-302	5/105W638 P2(A4SES2-AUX)	N/A	N/A	
	ТО	5/105W901 P1(A16J1)	5/105W901 56232ASSY1214756-305	5/105W901 P2(A35)	4	NULL	TO
	REMARK CABLE FROM	5/105W639 P1(A17-2C)	5/105W639 56232ASSY1221221-302	5/105W639 P2(A4SES1-EIA)	N/A	N/A	LO
312	ТО	5/105W906 P1(A17-2C)	5/105W906 56232ASSY1221221-304	5/105W906 P2(CP1)	3	SERIAL	
	REMARK CABLE FROM	5/105W667 P1(A17-1A2)	5/105W667 56232ASSY1223378-302	5/105W667 P2(A4SES2-AUX)	N/A	N/A	LO
	ТО	5/105W905 P1(A17-1A2)	5/105W905 56232ASSY1223378-303	5/105W905 P2(A35)	4	NULL	
	REMARK CABLE FROM	5/105W666 P1(A17-A1)	5/105W666 56232ASSY1214871-313	5/105W666 P2(A4SES1-EIA)	N/A	N/A	
315	ТО	5/105W907 P1(A17-A1)	5/105W907 56232ASSY1214871-331	5/105W907 P2(CP1)	3	SERIAL	
	REMARK CABLE FROM	5/105W667 P1(A17-A2)	5/105W667 56232ASSY1223378-301	5/105W667 P2(A4SES2-AUX)	N/A	N/A	
	ТО	5/105W908 P1(A17-A2)	5/105W908 56232ASSY1223378-304	5/105W908 P2(A35)	4	NULL	
304, 305, 309 AND 314	REMARK CABLE FROM	5/105W639 P1(A17C)	5/105W639 56232ASSY1221221-301	5/105W639 P2(A4SES1-EIA)	N/A	N/A	
	ТО	5/105W903 P1(A17C)	5/105W903 56232ASSY1221221-303	5/105W903 P2(CP1)	3	SERIAL	
	REMARK CABLE FROM	5/105W638 P1(A16J1)	5/105W638 56232ASSY1214756-302	5/105W638 P2(A4SES2-AUX)	N/A	N/A	
	ТО	5/105W901 P1(A16J1)	5/105W901 56232ASSY1214756-305	5/105W901 P2(A35)	4	NULL	

# SITE LISTING

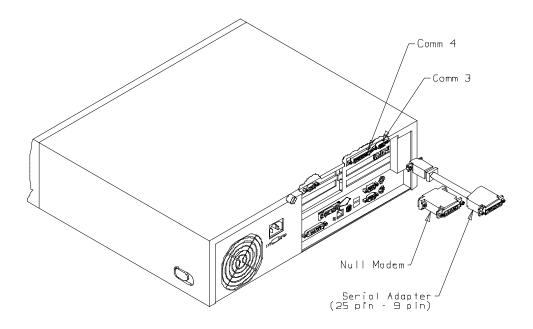
301 ABERDEEN, SD	301 ALPENA, MI	301 AMARILLO, TX
301 AUSTIN/SAN ANTONIO, TX	301 BROOKHAVEN, NY	301 BROWNSVILLE, TX
301 CHEYENNE, WY	301 CHICAGO, IL	301 EL PASO (SANTA TERESA), TX
301 GLASGOW, MT	301 GREEN BAY, WI	301 GREER, SC
301 JACKSONVILLE, FL	301 KNOXVILLE (MORRISTOWN), TN	301 LA CROSSE, WI
301 LAKE CHARLES, LA	301 LANDER (RIVERTON), WY	301 LOS ANGELES (SLPR MT), CA
301 MARQUETTE, MI	301 MOBILE, AL	301 MOREHEAD CITY, NC
301 NASHVILLE (OLD HICKORY), TN	301 NORFOLK/RICHMOND, VA	301 ODESSA/MIDLAND, TX
301 OMAHA (MEAD), NE	301 PADUCAH, KY	301 PENDLETON, OR
301 PITTSBURG, PA	301 QUAD CITY (DAVENPORT), IL	301 SAN JOAQUIN VALLEY, CA
301 SHREVEPORT, LA	301 SIOUX FALLS, SD	301 SLIDELL, LA
301 SPOKANE, WA	301 TAMPA BAY AREA, FL	304 KC BANNISTER MNTC, MO
304 KEESLER AFB, MS	304 NWS (OSF-2) NORMAN, OK	304 NWS TRAINING CENTER KC, MO
305 ANDERSON AFB, GUAM	305 BEALE AFB, CA	305 CANNON AFB, NM
305 CAMP HUMPHREYS, ROK	305 CENTRAL TEXAS, TX (FT HOOD)	305 COLUMBUS AFB, MS
305 DODGE CITY, KS	305 DOVER AFB, DE	305 DYESS AFB, TX
305 EDWARDS AFB, CA	305 EGLIN AFB (NORTHWEST FL), FL	305 FT CAMPBELL, KY
305 FT RUCKER, AL	305 FT. POLK, LA	305 FREDERICK, OK (ALTUS)
305 GOODLAND, KS	305 GRIFFISS AFB, NY	305 HOUSTON/GALVESTON, TX
305 KADENA AB, OKI	305 KANSAS CITY (PLEASANT HILL),MO	305 MAXWELL AFB (EASTERN AL), AL
305 MELBOURNE, FL	305 ST. LOUIS, MO	305 VANDENBURG AFB, CA
305 WASHINGTON (STERLING), DC	305 WICHITA, KS	305 HOLLOMAN AFB, NM
305 KEESLER AFB, MS	305 KEY WEST, FL	305 KUNSAN AB, ROK
305 LAJES AB, AZS	305 LAUGHLIN AFB, TX	305 MINOT AFB, ND
305 MOODY AFB, GA	305 ROBINS AFB, GA	305 VANCE AFB, OK
306 ALBANY, NY	306 ALBUQUERQUE, NM	306 ATLANTA (BEAR CREEK ARP), GA
306 BILLINGS, MT	306 BINGHAMTON, NY	306 BIRMINGHAM (SHELBY ARP), AL
306 BISMARCK, ND	306 BOISE (WILD HORSE CORRAL), ID	306 BOSTON, MA
306 BUFFALO, NY	306 BURLINGTON, VT	306 CENTRAL (SPRINGFIELD), IL
306 CHARLESTON, SC	306 CHARLESTON, WV	306 CINCINNATI/DAYTON, OH
306 CLEVELAND, OH	306 COLUMBIA, SC	306 CORPUS CHRISTI, TX
306 DALLAS/FT WORTH, TX	306 DES MOINES, IA	306 DULUTH, MN
306 EUREKA (BUNKER HILL), CA	306 FARGO/GRAND FORKS, ND	306 GRAND RAPIDS, MI
306 GREAT FALLS, MT	306 INDIANAPOLIS, IN	306 JACKSON, KY

LOT

306 LAS VEGAS (NELSON), NV	306 LORING AFB, ME	306 LOUISVILLE (FT. KNOX), KY
306 LUBBOCK, TX	306 MEMPHIS (MILLINGTON), TN	306 MILWAUKEE, WI
306 MINNEAPOLIS/ST. PAUL, MN	306 NORTH PLATTE, NE	306 PHILADELPHIA, PA
306 POCATELLO, ID	306 PORTLAND, ME	306 PORTLAND, OR
306 PUEBLO, CO	306 RALEIGH/DURHAM, NC	306 RAPID CITY, SD
306 ROANOKE (SIMPSONS), VA	306 SACRAMENTO VALLEY, CA	306 SAN ANGELO, TX
306 SAN DIEGO (MIRAMAR), CA	306 SAN FRANCISCO BAY AREA, CA	306 SANTA ANA MOUNTAINS, CA
306 SEATTLE, WA	306 SPRINGFIELD, MO	306 STATE COLLEGE, PA
306 TALLAHASSEE, FL	306 TUCSON (SANUARITA), AZ	306 WILMINGTON, NC
306 DENVER (FRONT RANGE), CO	306 DETROIT (SELFRIDGE), MI	306 GRAND ISLAND, NE
306 JACKSON, MS	306 LITTLE ROCK, AR	306 MIAMI, FL
306 OKLAHOMA CITY, OK	306 PHOENIX (WILLIAMS), AZ	306 TOPEKA (WABAUNSEE), KS
306 TULSA (INOLA), OK	306 WESTERN ARKANSAS	306 NORTHEAST ALABAMA
306 NORTHERN INDIANA	309 KEESLER AFB, MS	312 OSF-REDUNDANT, OK
314 KC BANNISTER MNTC, MO	315 NWS TRAINING CENTER KC, MO	N/A NSSL
N/A OSF (OPEN SYSTEMS), NORMAN		

TOC

LOT



TOC

LOT

Figure 3-1 Adapter Connection

## 3-3 LED STATUS INDICATORS

For terminal adjustment of the monitor and keyboard, reference the operators section of this manual.

The keyboard indicators are located on the upper right-hand side of the keyboard. See Figure 3-2 Keyboard Lights.

The following tables list the various keyboard light combinations, as well as the meaning and action associated with each combination:

Table 3-9 Keyboard Light Combinations with Terminal Lockup

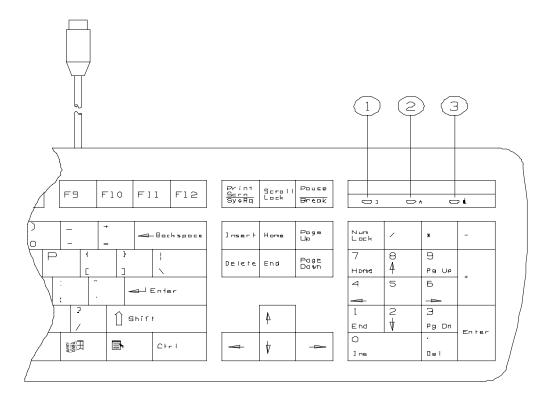
Num Lock (1)	Caps Lock (2)	Scroll Lock (3)	Meaning and Required Action
OFF	ON	OFF	System hardware setup has been incorrectly modified. Return to depot.
ON	OFF	OFF	System degraded or software setup has been incorrectly modified. Insert RDA/RPG Remote Access Terminal restoral CD ROM, and refer to Windows 95 restoral procedures.
OFF	OFF	ON	System degraded or software setup has been incorrectly modified. Insert RDA/RPG Remote Access Terminal restoral CD ROM, and refer to Windows 95 restoral procedures.



Num Lock (1)	Caps Lock (2)	Scroll Lock (3)	Meaning and Required Action
OFF	ON	OFF	Caps Lock active. Press <b>Caps Lock</b> to toggle.
ON	OFF	OFF	Num Lock active. Press <b>Num Lock</b> to toggle.
OFF	OFF	ON	Scroll Lock active. Press <b>Scroll Lock&gt;</b> to toggle.

TOC

LOT



- TOC
- LOT
- LOF

- Num Lock 1)
- 2) 3) Caps Lock
- Scroll Lock

Figure 3-2 Keyboard Lights

#### 3-4 DESCRIPTION OF EMULATION FUNCTION KEYS

#### 3-4.1 Setup Effects on the Keyboard

The following lists the setup menu options that affect operation of the keyboard in Applications and Systems Console modes.

- SHIFT TAB Keys Sets whether the cursor moves to the previous tab stop.
- Function Keys definitions Defines what code is generated when you press a function key.
- KDB CTRL Allows you to enable a protect feature to prevent accidental depression of keys.
- KDB LOCK Disables action of keys.
- KEY CLICK Causes audible click when you press a key.
- Multi-code CHAR Affects which key is set as the multi-code character; defaults to Esc.
- POUND CHAR Selects the character displayed. Valid options include Hash and Sterling.
- RETURN=SEND RETURN key operates as a Send key in Block mode.
- SEND CLEAR ALL Request to send lock keyboard. Screen does not clear until host responds with read sequence.
- SEND CRSR EDIT Transmits associated cursor or edit multi-code sequence to host.
- UPPER CASE Generates upper case character.

TOC

## 3-4.2 Alphanumeric Keys

Alphanumeric keys are divided into two types: Alphabetic and Numeric.

Alphabetic Keys: Consists of the characters A-Z. The codes produced depends on the following keyboard states:

- Shift key state
- Alt key state
- Control key state
- Caps lock state (default = Off)
- Key Lock setting in keyboard setup menu

In the default mode, alphabetic keys generate the following codes:

- Unshift generates lower case.
- Shift generates upper case.
- Control generates control codes.
- Control+Shift generates control codes.
- Alt generates control codes.

*Numeric Keys*: Consists of the non-alphabetic alphanumeric keys, including keys with numbers, symbols, and international characters. The codes produced depends on the following keyboard states:

- Shift key state
- Control key state
- Alt key state
- Num Lock state
- Caps Lock state (default = Off)

In the default mode, numeric keys generate the following codes:

- Shift and Unshift Generate numbers.
- Control and Control+Shift Generates local functions.

## 3-4.3 Using the Cursor Control Keys

The following sections describe the operation of the cursor control keys. The cursor control key group is shown shaded in Figure 3-3 Cursor Control Key Group.

If SEND CRSR EDIT is enabled under the SYSTEM heading in the Main Setup menu and press any of the cursor control keys, the terminal transmits the associated multi-code to the host computer.

If SEND CRSR EDIT is disabled, local cursor movement will not occur.

The operation of the keys is controlled in the Main setup menu under CURSOR. The EDIT KYS option is located

LOT

 $under \ the \ heading \ KDB \ CTRL. \ The \ CURSORS \ KYS \ option \ is \ located \ under \ the \ heading \ KDB \ LOCK, \ and \ both \ are \ identical \ in either \ shifted \ or \ unshifted \ conditions.$ 

TOC

LOT







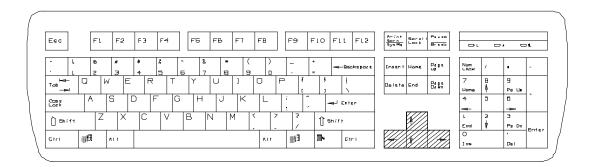


Figure 3-3 Cursor Control Key Group.

- Cursor Up ( ) Key: If SEND CRSR EDIT is disabled and the cursor up ( ) key is pressed, the cursor moves up one line. If the cursor up key is pressed when the cursor is positioned at line 1, the cursor wraps to the last display line.

Transmission to the host computer occurs only if the SEND CRSR EDIT field is set to "Y" in the configuration.

- Line Feed: If the SEND CRSR EDIT is disabled, pressing the cursor down key transmits a line feed and moves the cursor to the same column position on the next line.

If SCROLL is enabled under the mode heading, no attributes exist on the screen, and the cursor is at the last display line, then the screen scroll. If SCROLL is disabled in the setup configuration mode, the cursor wraps to the same column position on line 1.

- Cursor Right (\_\_\_\_) key

If the SEND CRSR EDIT is disabled and the cursor right ( ) key is pressed, the cursor moves right along its current line. If the cursor right is pressed when NEW LINE is enabled and the cursor is positioned at the right margin, the cursor wraps to column 1 of the following line. Otherwise, the cursor does not move beyond the end of the line.

Transmission to the host computer occurs only if the SEND CRSR EDIT field is set to "Y" in the configuration.

Cursor Left ( ) key:
 If the SEND CRSR EDIT is disabled and the cursor left ( ) key is pressed, the cursor moves left along its current line. If the cursor left key is pressed and the cursor is positioned at the left margin, the cursor wraps around to the right margin on the previous line.

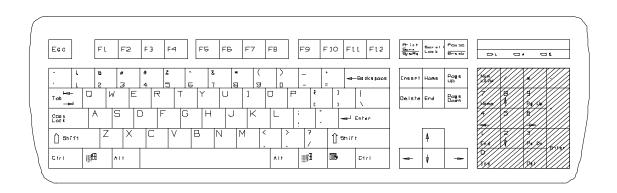
Transmission to the host computer occurs only if the SEND CRSR EDIT field is set to "Y" in the configuration.

#### 3-4.4 Using the Numeric Keypad

The numeric keypad includes keys for numbers 0 through 9, a plus, a minus, a times, a dash, a period, an insert, a delete, and an enter. The numeric keypad is shown shaded in Figure 3-4 Numeric Keypad.

TOC

LOT



TOC

LOT



Figure 3-4 Numeric Keypad

- **Enter>**: If the **Enter>** key is pressed in conversational mode, the terminal transmits a carriage return (ASCII CR character (X'OD')). If the **Enter>** key is pressed in block mode, the terminal performs a tab operation and positions the cursor at the next unprotected screen position.

The operation is controlled by the CR, LF option under the headings *KBD CTRL* and *KBD LOCK* in the Main Setup menu.

#### 3-4.5 Using the Dedicated Control/Function Keys

The following sections describe the keyboard functions performed when specific dedicated controls are pressed, or function keys, or combination of keys.

- **Backspace**> Key: The cursor moves one position to the left in an unprotected field. If the Backspace key is pressed in conversational mode, the terminal transmits an ASCII BS character (X'08') to the host computer. If the **Backspace**> key is pressed when the cursor is at column 1 of a line with NEW LINE enabled under the MODE heading in the Main Setup menu, the cursor wraps around to the right margin of the previous line. The cursor does not move beyond the Home position.
- Shift><Tab> Keys: The <Shift> and <Tab> keys move the cursor to the next or previous tab stop. (The first data character of an unprotected field is a tab stop.)

The operation of these keys are controlled in the Main setup menu by the *TAB BACKTAB* option under the headings *KBD CTRL* and *KBD LOCK*. If *KBD LOCK* is enabled, these keys do nothing.

- <Caps Lock>: When the <Caps Lock> key is pressed, the terminal forces all lower-case alphabetic characters to upper case. The Caps Lock indicator lights when the <Caps Lock> key is pressed and remains lit until the <Caps Lock> key is pressed again to exit the cap lock function. All keys other than alphabetic are unaffected by the cap lock function.
- <Ctrl><Break>: Use the (<Ctrl><Break>) key combination to send a Break (350 ms continuous space condition) over the serial port.
- **Tab>**: In Block Mode, the **Tab>** key moves the cursor to the next unprotected field on the screen. **Shift>Tab>** positions the cursor to the previous unprotected field. In conversational mode, the **Tab>** key sends a standard tab code (09h). **Shift>Tab>** sends the Backtab sequence (Multicode l).

The operation of the **Tab>** key is controlled by *TAB BACKTAB* under the headings *KBD CTRL* and *KBD LOCK*.

- **Delete**: In block mode, the **Delete**> key erases the character under the cursor. All characters in the field to the right of the cursor move to the left one position. The terminal places the proper fill character in the last position. When the terminal is in the conversational mode, **Delete**> sends the delete character sequence.

The operation of the **Delete>** is controlled by *CURSOR*, *EDIT KYS* under the headings *KBD CTRL* and *DBD LOCK*.

- **Shift><Delete>** (Delete Line): In block mode, this key deletes a line at the cursor position. The terminal does not send anything to the host in block mode. In conversational mode, the **Shift><Delete>** sends the delete line multi-code sequence (Multi-code M) to the host.

TOC

LOT

The operation of the **Shift> Delete>** is controlled by *CURSOR*, *EDIT KYS* under the headings *KBD CTRL* and *KBD LOCK*.

- <Insert>: In block mode, this key toggles the insert mode. When the terminal is in the insert mode, INS appears in the status line in the far right hand corner. The terminal software pushes all characters in the field to the right as characters are entered from the keyboard. Remove non blank characters from the end of the field to continue inserting. When the software is in the conversational mode, the <Insert> key sends the insert character sequence (Multi-code N).

The operation of the **Insert>** is controlled by *Cursor*, *EDIT KYS* under the headings *KBD CTRL* and *KBD LOCK*.

- **Shift><Insert>** (Insert Line): In block mode, the **Shift><Insert>** keys inserts a line at the cursor position. The terminal software does not send any character to the host while in this mode. In conversational mode, the **Shift><Insert>** sends the insert line multi-code sequence (Multi-code L) to the host.

The operation of the **Shift> Insert>** is controlled by *CURSOR*, *EDIT KYS* under the headings *KBD CTRL* and *KBD LOCK*.

**Home>** (Go to Home Position): In block mode, the **Home>** key (located in the numeric/cursor position keypad) places the cursor at the first unprotected field. In the conversational mode, this key sends the home cursor multi-code sequence (Multi-code H) to the host.

The operation of the **Home** is controlled by *CURSOR*, *EDIT KYS* under the headings *KBD CTRL* and *KBD LOCK*.

- < End> key (Block Mode Send): The < Enter> key works as the send key when you set Return = Send to Y. In conversational mode the < End> is not valid and produces a low frequency beep.
- **Shift><End>** (Close & Re-Open Printer): The **Shift><End>** keys let the print device be closed and re-opened. To close the assignment to flush data to a network printer, press **Shift><End>**.
- <Ctrl><End> (Review End Position): The <Ctrl><End> keys are used to go to the bottom of the review buffer. The status line indicates R1 or R2 depending upon the selected page (see the <Alt>P command). <Ctrl><End> cannot be used in the Block mode.
- **PgUp>** (Review Page Up): The **PgUp>** key moves the review buffer location up one page. The status line indicates the review buffer page number as R1 through R9 and 10 through 16. The **PgUp>** is valid in both the Conversational and Block modes.
- **Ctrl><PgUp>** (Review Line Up): The **Ctrl><PgUp>** keys move the review buffer location up one line. The status line indicates the review buffer page number as R1 through R9 and 10 through 16. **Ctrl><PgUp>** cannot be used in the block mode.
- **PgDn>** (Review Page Down): The **PgDn>** key moves the review buffer location down one page. The status line indicates the review buffer page number as R1 through R9 and 10 through 16. The **PgDn>** is valid in both the Conversational and Block modes.

**TOC** 

LOT

- **<Ctrl><PgDn>** (Review Line Down): The **<Ctrl><PgDn>** keys move the review buffer location down one line. The status line indicates the review buffer page number as R1 through R9 and 10 through 16. **<Ctrl><PgDn>** cannot be used in the block mode.
- <Alt><Print Scrn>: Pressing the <Alt><Print Scrn> copies the current windows image on the terminal and can be used to paste to a wordpad document. To copy the entire screen image use <Print Scrn>.
- **Scroll Lock>** (Scroll Hold): Initial depression of this alternate action key stops the display of data on the screen. A second depression of this key allows data display again. Since the terminal sends an XOFF character, the host computer must recognize XOFF/XON or you might lose data. The status line displays *HLD* to remind you that the host's data will not be displayed. When you are in the HLD state, the review buffer keys and the simulated mouse keys are available.
- **Alt>C** (Clear Screen/End Configuration Mode): Pressing **Alt>C** causes all data on the screen to be cleared to nulls or spaces (as defined during configuration) and causes the cursor to return to the home position. Tab stops are reset to the default positions (every eighth column.)

If the *Send Clear All* feature is enabled in the configuration menu, a request to send sequence (multicode R\_) is transmitted to the host. Until the host responds with a read sequence, screen data is not cleared.

When the *Send Crsr, Edit* parameter is enabled in the configuration menu, no local action occurs upon depression of the **Alt>C** key but the multi-code K clear is transmitted to the host. When the *Send Crsr, Edit* parameter is disabled, the indicated action is performed locally and no transmission to the host takes place.

The operation of the **Alt>C** is controlled by *Cursor*, *Edit Kys* under the headings *Kbd Ctrl* and *Kbd lock*.

When in the configuration mode, use **Alt>C** to exit the configuration mode and save any changes to disk.

- **Shift>** Alt>C (Enter Configuration Mode): **Shift>** places you into the configuration mode. Press **Alt>**C to save changes.
- **Alt>E** (Erase Line Cursor End): Pressing **Alt>E** clears the line to nulls or spaces (specified during configuration) from the cursor to the end of the line. When the cursor is formatted, this key clears all unprotected characters in the field from the cursor position to the first attribute character encountered on the screen.

When the *Send Crsr*, *Edit* is enabled in the configuration menu, no local action occurs, instead, a multicode I (clear line) sequence is sent to the host.

When the *Send Crsr, Edit* is disabled, the indicated action is performed locally and no transmission to the host takes place.

The operation of the **Alt>E** is controlled by *Cursor*, *Edit Kys* under the headings *Kbd Ctrl* and *Kbd lock*.

- **Shift><Alt>E** (Erase Page - Cursor End): Pressing **Shift><Alt>E** clears all unprotected char-

TOC

LOT

acters from the cursor position to the end of the screen to nulls or spaces (specified during configuration).

When the *Send Crsr*, *Edit* is enabled in the configuration menu, no local action occurs, instead, a multicode J (clear unprotected) sequence is sent to the host. When the *Send Crsr*, *Edit* is disabled, the indicated action is performed locally and no transmission to the host takes place.

The operation of the **Shift>** is controlled by *Cursor*, *Edit Kys* under the headings *Kbd Ctrl* and *Kbd Lock*, and the *send Crsr*, *Edit Kys* end the system heading.

- <Alt>F (Function Key Toggle): The <Alt>F keys toggle the state of function key translation. If you are in the mode, the <Alt>F key is not allowed. The <Alt>F key toggles between the FKT and FKN modes.

In conversational mode, the status line displays the current value of the function key translation mode. In the block mode, the status line cannot display the current translation state, so you are alerted with a beep when you enter the FKT mode. Note, even if you change modes while you are in the block mode, your original mode is restored when you return to the conversational mode.

TOC

- <Shift><Alt>F (Block/Conversational Toggle): The <Shift><Alt>F keys toggle between block mode and conversational mode. Caution! If you use the <Shift><Alt>F keys while the host is still active, you may not be able to converse with the host properly.

LOT

- **Alt>H** (On-line Help): The **Alt>H** keys display PC Passport Software screen on-line help. To remove the help screen press any key on the keyboard. All help displays use the color selected for HelpBG and HelpFG by the color or SHow color commands. This allows you to tailor the appearance of your help display without affecting your applications.

LOF

Anytime a help screen is displayed, it vanishes when the screen dependent time-out expires or the key-board is touched. When a help time-out occurs, the software resumes normal operation.

- **<Alt>L** (Line Drawing Toggle): This key toggles the line drawing mode of the software. Use the **<Alt>L** key to escape from or enter line drawing mode. While using a modem, line noise can place the software into the line drawing mode erroneously. Press **<Alt>L** to remedy this problem. (This function is not necessary for System Console or Application Software operations.)
- **Shift><Alt>L** (Local Mode Toggle): Pressing **Shift><Alt>L** toggles in and out of local mode. When you enter local mode, the status line displays LOC. In local mode, everything is acted on locally and data from the host is not displayed. The software buffers up to 4 KB of the host's data. When flow control is enabled, the software sends an XOFF as its terminal buffers approach full. When you leave the local mode, the host's data displays. (This function is not necessary for System Console or Application Software operations.)
- **<Alt>P** (Page 1/Page 2 Toggle): The software provides two independent display pages in addition to the review buffer. Press **<Alt>P** to switch to the alternate page. The status line displays P1 or P2, indicating the current display page. (This function is not necessary for System Console or Application Software operations. Use the page forward **<F6>** function key.)
- **Shift>** (Paste Copy Buffer data): This key pastes data from the copy buffer starting at the current cursor position. It is the same as the click right with the mouse when no highlight is present. You can also use this key combination with the **Ctrl> key** (**Ctrl> Shift>** to enter the edit

mode.

- Shift><Alt>S (Status Line Toggle): This key set toggles the display state of the status line. Each time you type <Shift><Alt>S the display toggles between the status line and the message line. If no message line has been defined, you will receive a blank line displayed in the status line colors. If the status line is in non-display mode and an error occurs, the terminal displays the status line so you can see the error. When the error condition is reset by pressing the <Esc> key, the status line turns off again. If the status line is in display mode, only the error condition disappears. <Shift><Alt>S is active in all modes.
- <**Alt>**U (local Unlock): If the terminal software locks the keyboard, and the host connection is lost, <**Alt>**U can unlock the keyboard.
- **<Alt>V** (View Attributes): Use **<Alt>V** to enter the view attribute mode and the terminal software stops the display of data from the host.

In the view attribute mode, the current screen displays using the help background and foreground colors. Screen attributes display as characters in inverse fields. If data in a field has its modified data tag set, it displays as blinking even if you have selected intensity mode for the monitor. Restore the monitor to its original state by the context-sensitive help shows the relationship between the display attribute characters and their characteristics. View the help screen by pressing **Alt>H**. Pressing any other key will revert operations.

- <Alt>X (Exit PC Passport, Configuration, etc.): <Alt>X is the terminal software exit key. If <Alt>X is entered while in the command or connect mode screen, a menu pops up allowing program termination by typing a second <Alt>X. <Alt>X is also used in many pop-up boxes to proceed without making changes. Use the mouse to make menu selections by dragging and clicking to select the response desired. The following outlines the pop-up boxes following an <Alt>X command.

Selecting <**Alt>X** while in the connect mode produces the following pop-up box:

Do you wish to exist PC Passport now?		
E or <alt>X</alt>	Same as END command (disconnect modem)	
X	Same as EXIT command (leave modem connected)	
C	Remain in connect mode	

Pressing <**Alt>X** while in the command mode produces the following pop-up box:

Do you wish to exit PC Passport now?		
E or <alt>X</alt>	Same as END command (disconnect modem)	
X	Same as EXIT command (leave modem connected)	
C	Remain in command mode	

**TOC** 

LOT

Pressing **Alt>X** again, or **E**, terminates PC Passport. Press **X** and PC Passport terminates which is equivalent to entering the EXIT command. If this display is received after accidentally typing **Alt>X**, press **C** to return to the connect or command mode. If configuration changes have been made using PC Passport's command mode, the following pop-up box appears before PC Passport terminates:

Your configuration has changed!
Do you want to save the changes?

 $egin{aligned} N \text{ or } <\!\!Alt\!\!>\!\! X & Do not update the configuration file} \ Y & Update the configuration file \end{aligned}$ 

Pressing <**Alt>X** again, or **N** terminates PC Passport without making changes to the configuration file. Press **Y** to update the configuration file before it terminates.

While in the configuration mode, press **Alt>C** to save changes to disk before returning to the connect mode. To void any changes or to have the changes take effect without changing the disk configuration file, type **Alt>X** and the following pop-up box will appear:

TOC

LOT

Do you wish to abort the configuration?

A or <Alt>X Abort configuration (lose changes)

Save configuration locally (no disk update)

C Remain in configuration mode

LOF

Pressing **Alt>X** again, or **A** terminates the configuration mode, discarding all changes made. Press <S> to save changes locally without saving them to disk. If this display is received by accidentally typing **Alt>X**, press **C** to return to the configuration mode.

Typing **Alt>S** when in the edit mode saves changes and exists the edit mode. To undo changes or abort the edit, type **Alt>X** to receive the following pop-up box:

Do you wis	h to abort Edit?	
A or <alt>X</alt>	Abort Edit	(Undo changes).
P	Resume Edit	(Preserve changes).
U	Resume Edit	(Undo changes).

Pressing **Alt>X** again, or **A** terminates the edit mode, discarding all changes made. Press **U** to return to the edit mode after discarding all changes. If this display is received by accidentally typing **Alt>X**, press **P** to return to the edit mode with all changes intact.

#### 3-5 MESSAGE AND STATUS LINES

The terminal displays status information on line 25. If you wish to display the message line during normal operation of your terminal, enter **Y** for Yes at the DSPLAY STAT LN option in the Main Setup menu. If there is an error condition present in the terminal, the terminal automatically causes the status line to reflect the cause. Pressing **<Ctrl><Break>** will clear most problems and the user can resume normal operations.

The status line can be read as follows:

#### User Area (Columns 2-31)

The day, date, and time is placed here by the RDASC or the RPGDP.

## Line Number (Columns 33-35)

This field displays the line number the cursor is positioned on.

#### Column Number (Columns 37-40)

This indicates the column number of the cursor position.

#### Page Number (Columns 42-43)

This field displays P1 or P2 indicating the current page number.

#### Error Indicator (Columns 42-52)

When an error occurs, the status line is displayed containing the appropriate message. The following list provides the errors and their description.

Error Description

BIOS ERR BIOS would not accept data for output (time-out)

EAROM CK Configuration file checksum error
ENTRY ER Invalid entry in configuration mode
FLD PROT Entry attempted in a protected field
FRM ERR Framing error or serial port

INPUT ER Illegal entry/function attempted
NUM FLD Alpha character entered into a numeric field
ON ATTR Attempt to overwrite an attribute character

OVR ERR Overrun error on serial port PAR ERR Parity error on serial port

UART ERR UART would not accept data for output (time-out)

Information messages - Esc key does not clear

Port N Current serial port (Port 1-4)
BIOS N Current BIOS port (BIOS 1-4)

COMMxx Current CrossConnect port (COMM01-20)

KBD LOCK Keyboard locked (Press **<Alt>U**)

## Communications Status Field (Columns 54-56)

This indicates the operating mode, FDX, HDX, OR LOC.

#### Modem Status Field (Columns 58-59)

If data is being sent to the host, DR is displayed for data received. If the terminal is sending data to the host, CS is displayed for clear to send

#### Send Mode Field (Columns 61-68)

TOC

LOT

This displays the current transmission mode as follows:

Mode	Description
CV FKT	Conversational Mode - Function Key Translate
CV FKN	Conversational Mode - Function Key Normal
CV FKL	Conversational Mode - Function Key Locked
BL RS AL	Block Mode - Request to Send All
BL RS M	Block Mode - Request to Send Modified
BL RS UN	Block Mode - Request to Send Unprotected
BL IM AL	Block Mode - Send Immediate All
BL IM M	Block Mode - Send Immediate Modified
BL IM UN	Block Mode - Send Immediate Unprotected

## Auxiliary Port Field (Column 70-72)

This field displays printer status. If **Ctrl><Print Scrn>** or **Shift><Print Scrn>** has been accidentally pressed, this field will display PRT, and the keyboard may lock until **Ctrl><Print Scrn>** or **Shift><Print Scrn>** is toggled off. Other print status related messages are as follows:



<u>Printer</u>	Description	LOT
ERR PRT	Error on printer port - Printer not ready <ctrl><print scrn=""> or <shift><print scrn=""> print in progress</print></shift></print></ctrl>	
AX AXT	Simulprint in progress Simulprint non-display in progress	LOF
SAV	Save the file in progress <b>Alt&gt;S</b>	

#### Scroll Hold Key Field (Columns 74-76)

When **Scroll Lock** is pressed this field displays HLD.

## Reminder Field (Columns 78-80)

This field displays the current mode of the PC Passport software.

<u>Mode</u>	<u>Description</u>
CG	Configuration Mode
CGI	Configuration Insert Character Mode
INS	Insert Character Mode
PG	Screen Program Mode
TM	Transparent Mode
/-\	Data Transfer Mode (Rotating Wheel)

#### 3-6 MOUSE SUPPORT

The RDA/RPG Remote Access Terminal software supports copy and paste, cut and paste, and edit functions. This software includes PC Passport, pcANYWHERE, and Windows 95. The functions identified (copy and paste, cut and paste, and edit) are normally performed by using a mouse, but also can be accessed from the keyboard.

Moving the mouse produces an immediate response when using the terminal software. In System Console or Application Software mode, when the mouse is moved, the normal status line display is replaced with a message defining the options available and the mouse cursor appears. The mouse cursor and the status line message disappear when a key is pressed on the keyboard and when data is being received from the host computer (RDA or RPG). Some mouse actions, like dragging or highlighting, prevent data entry from the keyboard when in System Console or Application

Software mode. When the mouse action ends, normal communication with the keyboard resumes.

## 3-6.1 Using a Mouse in Setup Configuration Mode

The Configuration screen contains 59 fields with 46 modifiable entry fields. A left click is used to transition to any field after mouse cursor positioning. When the mouse cursor and the real cursor overlay each other in one of the 46 modifiable fields, a left click selects the next choice. Continue clicking left without moving the mouse to set through a list of valid choices. Other mouse functions including copy and paste and cut and paste may also be used in Setup Configuration mode.

## 3-7 COMMON KEYSTROKES, START-UP, SHUTDOWN AND RECOVERY METHODS.

The following information is provided to make using the new equipment easy. The conversion charts explain the keystroke changes that are necessary. The start-up, shutdown and emergency termination procedures explain additional steps that are necessary with the new equipment. These additional steps are very important to protect the RDA/RPG Remote Access Terminal from hardware and software damage. All maintenance and operations personnel should become familiar with these procedures.

**TOC** 

LOT

Table 3-11 UCP CDT-100 / RDA/RPG Remote Access Terminal Conversion Chart UCP

RDA/RPG Remote Access Terminal Keystrokes	CDT-100 Keystrokes	Comments
<f1><f12> <alt><f1><f12> <shift><f1><f12></f12></f1></shift></f12></f1></alt></f12></f1>	<f1><f12> <f11><f22> <f21><f32></f32></f21></f22></f11></f12></f1>	Use the new function key template for the UCP function keys.
<enter></enter>	<return></return>	Equivalent for command entry
<alt><tab></tab></alt>	<shift><port></port></shift>	Toggles between Systems Console and Applications Software. <alt><tab> is an alternative to the mouse for positioning.</tab></alt>
<alt>X <alt>X</alt></alt>	N/A	Properly exits the PC Passport Software.
<alt>U</alt>	<break></break>	Unlocks the keyboard
<alt>H</alt>	N/A	Allows you to get a help listing for PC Passport. Press <a href="#">Alt&gt;H</a> to toggle off the help listing.
<ctrl><break></break></ctrl>	<break></break>	Refreshes the screen. Also used after <alt>U for keyboard lockups. <ctrl><break> serves the same purpose as <break> used with the CDT-100.</break></break></ctrl></alt>
Mouse	N/A	The purpose of the mouse is to position the cursor. Can also be used to toggle settings in terminal setup mode.
<ctrl>S or <ctrl>Q</ctrl></ctrl>	<ctrl>S or <ctrl>Q</ctrl></ctrl>	Used to pause screen from scrolling and to start scrolling. (For Systems Console operations)
<alt>E</alt>	<line char="" delete=""></line>	Line delete character

Function keys SHALL NOT be used in the Systems Console.

TOC

LOT

Table 3-12 RDA MMI CDT-100/RDA/RPG Remote Access Terminal Conversion Chart  $RDA\ MMI$ 

RDA/RPG Remote Access Terminal <u>Keystrokes</u>	CDT-100 Keystrokes	Comments
<f1></f1>	<f1></f1>	Refreshes the screen. Also used after < <b>Alt&gt;</b> U for keyboard lockups. < <b>Ctrl&gt;<break></break></b> serves the same purpose at the UCP.
<enter></enter>	<return></return>	Equivalent for command entry
<alt><tab></tab></alt>	<shift><port></port></shift>	Toggles between Systems Console and Applications Software. <a href="Alt">Alt</a> can only be used in host mode.
<alt>X</alt>	N/A	Followed by E properly exits the PC Passport Software.
<alt>U</alt>	<break></break>	Unlocks the keyboard
<alt>H</alt>	N/A	Allows you to get a help listing.  Press <b>Alt&gt;H</b> to toggle off the help listing.
<ctrl><break></break></ctrl>	<break></break>	Refreshes the screen and returns to the main menu. Also used after <a href="Alt&gt;U">Alt&gt;U</a> for keyboard lockups. <a href="Ctrl&gt;&lt;Break">Ctrl&gt;<break< a="">&gt; serves the same purpose as <a href="Break">Break</a>&gt; used with the CDT-100.</break<></a>
Mouse	N/A	The purpose of the mouse is to position the cursor. Can also be used to toggle settings in terminal setup mode.
<shift><alt>C</alt></shift>	<shift><setup></setup></shift>	Enters into the terminal setup screen. To exit the terminal setup press <alt>C. The appropriate terminal setups were established per EHB 6-510 (RDA MAINTENANCE MANUAL).</alt>
<ctrl>S or <ctrl>Q</ctrl></ctrl>	<ctrl>S or <ctrl>Q</ctrl></ctrl>	Used to pause screen from scrolling and to start scrolling. By pressing the <pause> key will either pause the scrolling or restart scrolling.</pause>

Function keys SHALL NOT be used in the Systems Console.

TOC

LOT

# RDA/RPG REMOTE ACCESS TERMINAL STARTUP PROCEDURES

#### Note

The terminal contains two program *objects* (icons) called Applications and System Console. They are accessed by following the **Start**, **Programs**, **Start-up** menu tree from the taskbar. Since they are *program objects* and not actual programs on the hard drive, you can not access them directly from the desktop or from a DOS prompt.

$\underline{\text{Step}}$	Equipment/Location	Action/Procedure	Indication/Response
1	RDA/RPG Remote Access Terminal (CPU)	Set Power Switch to ON	POWER ON indicator on CPU illuminates
2	RDA/RPG Remote Access Terminal monitor	Set Power Switch to ON	POWER ON indicator on monitor illuminates
	RDA/RPG Remote Access Terminal con ed to step 3. The terminal is ready to op	= = = = = = = = = = = = = = = = = = = =	cations Software running, do not
3	RDA/RPG Remote Access Terminal (System Console)	<ul> <li>a. If CDS&gt; prompt is not observed, press <b><enter></enter></b> until CDS&gt; prompt appears.</li> <li>b. Enter <b>KEY 1</b>, password</li> </ul>	CDS> prompt appears on screen.
		c. Enter <b>PO ON</b>	Powers up the RPG.
		d. Press <b><enter></enter></b> .	"*" prompt appears on Screen.

#### Note

Sometimes it will be necessary to *Wake Up* the terminal after restarting it. If you are using the Applications terminal, press <**Ctrl**><**Break**> or <**F1**>. If you are using the Systems Console, press <**Enter>** a few times until your \* or CDS> prompt is displayed. If you are going to reboot the RDA/RPG Remote Access Terminal (CPU), close both terminals in the appropriate manner (i.e. press <**Alt>X** twice) and then close pcANYWHERE in the normal manner (i.e. click on the **x** box and **Cancel**), and then close Windows by performing a Shutdown (**Start**, **Shutdown**, **Restart**, **Yes**.)

TOC

# RDA/RPG REMOTE ACCESS TERMINAL SHUTDOWN PROCEDURES

#### Note

This procedure is used to shutdown the terminal. This doesn't shutdown the RDA or the RPG.

Step 1	Equipment/Location At the PC (in Applications Software) RDA/RPG Remote Access Terminal (Applications window)	Action/Procedure Press <alt>X twice</alt>	Indication/Response Exit Applications SW
2	At the PC (in Systems Console mode) RDA/RPG Remote Access Terminal (Systems Console window)	Press <b><alt>X</alt></b> twice	Exit Systems Console
3	At the pcANYWHERE Waiting button on the Windows 95 tool bar	Select <b>pcANYWHERE Waiting</b> and Select <b>Cance</b>	Cancel pcANYWHERE
4	At the Main Menu	Select Start and Shutdown Choose to Shutdown the Computer	Shutdown Windows 95 PC Power On indica tor goes of and monitor Power ON indicator turns red.
5	At the RDA/RPG Remote Access Terminal Monitor	Set Power Switch to <b>OFF</b>	Power ON indicator on monitor goes off

TOC

LOT

LOF

## **CAUTION**

#### **Emergency Termination**

The system is set up to start all three software programs (pcANYWHERE, PC-Passport and Windows 95) after a reboot. If either Applications Software of System Console is locked, press **<Alt>U** to unlock the keyboard followed by **<Alt>X**, twice to properly close the software. If **<Alt>U** does not unlock the keyboard, press **<Ctrl><Break>**. If neither of these methods unlocks the keyboard, use the mouse to close the Window. This is an <u>abnormal shutdown</u> of Applications Software and System Console running under PC-Passport, and the remaining software will need to be closed and the machine restarted.

If Windows 95 should fail to do an orderly shutdown, as a last resort press the PC <u>reset</u> button or cycle the PC power. This will reboot the RDA/RPG Remote Access Terminal and restart the programs. However, every attempt should be made to close all of the software down first, before performing an emergency termination. This includes pcANYWHERE, Applications Software, System Console running under PC-Passport, and Windows 95.

#### Note

If you are going to reboot the RDA/RPG Remote Access Terminal, close both terminals in this manner and then close pcANYWHERE in the normal Windows manner before performing a Shutdown (**Start**, **Shutdown**, **Restart**, **Yes**.)

#### 3-8 CONFIGURATION

The operation of RDA/RPG Remote Access Terminal is controlled through the configuration screens. There are separate configuration files for Applications Software and Systems Console. The RDA/RPG Remote Access Terminal can be configured by the responsible maintenance person with the keyboard or by the host computer. Changes made in either mode can be saved to memory for temporary use or to disk for permanent use. When the configuration is saved to disk, the RDA/RPG Remote Access Terminal uses the file name specified in the *Configuration File* = field.

#### 3-8.1 Configuration Options

Configuration of the RDA/RPG Remote Access Terminal Applications Software and Systems Console are controlled by setting options contained in the configuration menu. These options are logically grouped into eleven categories according to function. Table 3-13 Option Categories, associates each configuration screen category with its related options. A detailed discussion of the category options is provided following the recommended parameter configurations. These categories are:

Table 3-13 Option Categories

Screen Category	Definition
Kdb Ctrl	Keyboard control protection options
Kdb Lock	Keyboard lockout options
Mode	Mode control options
System	Systems options
Comm	Communication options
Printer	Printer options
Comm	Communication port options
Prt	Printer port options
Terminator	Special character terminators
Configuration File	Configuration file name
Function Keys	Function key definitions

#### 3-8.2 Main Setup Menus

The main setup menus are provided in the paragraph 3-8.4 Terminal Parameter Configuration. These menus contain options for reconfiguration. Certain option selections will render the terminal inoperable. Rely on recommended setups to prevent this from occurring.

## 3-8.3 Configuration by Maintenance Personnel

The RDA/RPG Remote Access Terminal Software can be configured through keyboard entries. The configuration mode is entered by pressing **Shift> Alt>C** simultaneously. Configuration changes can be made while using a modem and the connection will be maintained.

Make changes to the configuration by entering the proper response in the field preceding each option. For most options, the entry is an upper or lower case Y (Yes) or N (no). The entries for the Com and Prt categories are chosen from a list immediately to the right of the entry field. These entries are also case sensitive. The remaining fields con-

TOC

LOT

tain one or more characters. These fields are case sensitive and the characters are treated literally. The mouse makes these changes easier. Move the mouse cursor to the desired field and click left to position the real cursor. Repeated left clicks will step through the field selections.

When entering control characters in the configuration mode, they display as if the terminal was in transparent mode. The terminal downloads a special character set (font) that represent the control characters with mnemonics.

If the Clock Display is enabled, choose the display format with the **Alt>D** keys. Every time the **Alt>D** keys are pressed, the date and time display on the status line changes. The following example uses July 1, 1994 at one second before midnight. The format of the first two examples change depending upon the country code information. Select one of the following formats:

Clock Display Format

07/01/94 23:59:59 Fri 07/01/94 23:59:59 Fri Jul 01, 1994 23:59:59

TOC

LOT

LOF

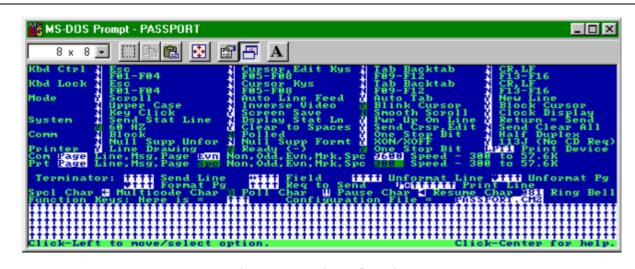


Figure 3-5 Sample Configuration Screen

\* Shaded areas are protected fields, and can not be changed.

## 3-8.4 Terminal Parameter Configuration

The following list provides the recommended terminal configuration. If System Console and/or Applications Software does not operate normally, use this list to make changes:

	<u>RDA</u>		<u>UCP</u>	
<u>PARAMETER</u>	<u>System Console</u>	<u>Application</u>	<u>System console</u>	<u>Application</u>
Kbd Ctrl				
Esc	N	N	N	N
Cursor, edit kys	N	N	N	N
Tab backtab	N	N	N	N
Cr,lf	N	N	N	N
F01-F04	N	N	N	N
F05-F08	N	N	N	N
F09-F12	N	N	N	N
F13-F16	N	N	N	N
Kbd Lock				
Esc	Y	Y	Y	Y
Cursor, edit kys	N	N	N	N
Tab Backtab	N	N	N	N
Cr, lf	N	N	N	N
F01-F04	Y	N	Y	N
F05-F08	Y	N	Y	N
F09-F12	Y	N	Y	N
F13-F16	Y	N	Y	N
Mode				
Scroll	Y	Y	Y	Y
Auto line feed	N	N	N	N
Auto tab	Y	Y	Y	Y
New line	Y	Y	Y	Y
**Upper case	N	N	N	N
**Inverse video	N	N	N	N
*Blink cursor	Y	Y	Y	Y
**Block cursor	Y	Y	Y	Y
**Key click	N	N	N	N
**Screen save	Y	Y	Y	Y
*Smooth scroll	N	N	N	N
Clock Display	Y	Y	Y	Y
System				
Send Stat Line	Y	Y	Y	Y
**Dsplay stat ln	Y	Y	Y	Y
Pwr up on line	Y	Y	Y	Y
Return=send	Y	Y	Y	Y

Indicates that the field is fixed and cannot be changed.

TOC

LOT

<sup>\*\*</sup> The values picked for these parameters are not necessary for system operation nor are they downloaded by the RDA or Processor to the RDA/RPG Remote Access Terminal.

## Terminal Parameter (Cont.)

**RDA** 

	<u>KDA</u>		<u>0C1</u>		
PARAMETER Sections	System Console	<u>Application</u>	System console	<u>Application</u>	
System *60 Hz	N	N	Y	N	
	Y	Y	Y	Y	
Clear to space	n N	N	Y	n N	
Send crsr, edit Send clear all	N N	N N	N N	N N	
Send Clear an	IN	IN	IN	IN	
COMM					
Block	N	Y	N	Y	
*Polled	N	N	N	N	
One stop bit	Y	Y	Y	Y	
Half duplex	N	N	N	N	T
Null supp unfor	N	N	N	N	1
Null supp for	N	N	N	N	
Xon/off	Y	Y	Y	Y	
113J	Y	Y	Y	Y	L
Printer					
Line Drawing	N	Y	Y	Y	
*Ready(-)	Y	Y	Y	Y	T
*One stop bit	Y	Y	Y	Y	
Print Device	LPT1	LPT1	LPT1	LPT1	
Comm					
Comm mode	Page	Page	Page	Page	
*Parity	Even	Even	Even	Even	
*Baud	9600	9600	9600	9600	
Daud	7000	7000	7000	7000	
Printer					
Prt mode	Line	Line	Line	Line	
Parity	Space	Space	Space	Space	
Baud	9600	9600	300	9600	
Terminator					
Send line	Ex cn Cn cn	Ex cn Cn cn	Ex cn cn cn	Ex en en en	
Field	Gs en Cn en	Gs cn Cn cn	Gs cn Cn cn	Gs en Cn en	
Unformat line	Cn en Cn en	Cn cn Cn cn	Cn en Cn en	Cn en Cn en	
Unformat pg	Ex en Cn en	Ex cn Cn cn	Ex Cn en en	Ex Cn en en	
10					

**UCP** 

Indicates that the field is fixed and cannot be changed.

<sup>\*\*</sup> The values picked for these parameters are not necessary for system operation nor are they downloaded by the RDA or Processor to the RDA/RPG Remote Access Terminal.

## Terminal Parameter (cont.)

	RDA		<u>UCP</u>		
<u>PARAMETER</u>	<u>System Console</u>	<u>Application</u>	<u>System console</u>	<u>Application</u>	
Terminator					
Format pg	Ex cn Cn cn	Ex cn Cn cn	Cn cn cn cn	Ex Cn cn cn	
Req to send	Cn cn Cn cn	Cn cn Cn cn	Cn en en en	Cn en en en	
Print Line	Cn lf cn Cn cn cn	Cr lf en Cn en en	Cr lf en en en	Cr lf en en en	
	Cn cn	Cn cn	Cn cn	Cn cn	
Spec Char					
Multiple code	Ec	Ec	Ec	Ec	
* Poll char	A	Nu	A	A	
Pause char	D3	D4	D3	DC3	
Resume char	D1	D2	D1	DC1	TOC
Ring bell	80	80	80	80	100
Function					
Keys: Here is =					LOT
Configuration File=	Passport.cm3	Passport.cm4	Passport.cm4	Passport.cm3	

<sup>\*</sup> Indicates that the field is fixed and cannot be changed.

<sup>\*\*</sup> The values picked for these parameters are not necessary for system operation nor are they downloaded by the RDA or Processor to the RDA/RPG Remote Access Terminal.

To exit the configuration mode, and save changes to disk, depress the **Alt>C** keys. If an error exists, there will be a warning beep, the status line displays ENTRY ER; and the cursor remains in the configuration mode with the cursor positioned to the first illegal entry. The color red is specified as an error color and used to highlight the field in error. This greatly reduces search time on the screen. If all changes are valid, the new options are written to disk.

To forego saving changes to disk, press the  $\langle Alt \rangle X$  keys instead of  $\langle Alt \rangle C$ . After pressing  $\langle Alt \rangle X$ , the following choices are given:

Do you wish to abort the configuration?

A or <**Alt>X** Abort configuration (lose changes)

Save configuration locally (no disk update)

C Remain in configuration mode

## 3-8.5 KBD CTRL Category

When the control protect function is enabled, hold the **<Ctrl>** key depressed while pressing the desired key to perform its usual function. If the control protect function is disabled, just press the desired key. Note, when a key is not control protected, pressing the **<Ctrl>** key in addition to the key *will not perform* the desired function. The following sections define the keys that are affected by the control protect feature. The header for each section matches the field label on the configuration screen.

# TOC

LOT

## 3-8.6 Esc:

If control protection is enabled, press **Ctrl><Esc>** to send a multi-code character or **Ctrl><Shift><Esc>** to enter the local escape mode.

LOF

If control protection is not selected, press the <Esc> key. Do not press the <Ctrl> key, it will not perform the desired function.

## 3-8.7 Cursor, Edit keys:

The cursor and edit keys consist of the cursor position keys and the edit key. The cursor position keys are the Home key, the  $\uparrow$ ,  $\longrightarrow$ , and  $\downarrow$  (line feed) keys. The edit keys are the **<Insert>** and **<Shift><Insert>** keys, the erase line/page (**<Alt>E<Shift><Alt>E**) keys, the **<Delete>** and **<Shift><Delete>** keys and the **<End>** (Block Mode Send) key. If control protection is enabled, press **<Ctrl>** with any of these keys to perform their usual function.

If control protection is not selected, press the upper arrow cursor key or edit keys alone. Do not press the **<Ctrl>** key at the same time; this combination will not perform the desired function.

- **Tab Backtab**: The Tab and Backtab keys consist of the **Tab**> key and the **Shift**>**Tab**> (Backtab) key. If control protection is enabled press **Ctrl**>**Tab**> to send a Tab character or **Ctrl**>**Shift**>**Tab**> to send a Backtab.

If control protection is not selected, press the **Tab>** or **Backtab>** keys. Do not press the **Ctrl>** key at the same time; this combination will not perform the desired function.

- CR,LF: The Cr and LF keys consist of the Carriage Return (Enter) key and possibly the Line Feed key. If control protection is enabled, press < Ctrl > CEnter > to send a CR character. Note,

**Ctrl><Enter>** is normally an alternate method of sending a line feed character. If the *SEND CRSR*, *EDIT* field is disabled, the 

key is treated as a line Feed key. Therefore, if control protection is

enabled, you must press <Ctrl> and the  $\forall$  to send a line feed character.

If control protection is not selected, press CR or LF keys. Do not press the **<Ctrl>** key at the same time; this combination will not perform the desired function.

- F01-F04: The <F01>-<F04> keys consist of the <F01>, <F02>, <F03>, <F04>, <F17>, <F18>, <F19> and <F20> keys. If the control protect function is enabled, press the <Ctrl> key in addition to the normal sequence required for the key.

If control protection is not selected, press the function keys. Do not press the **<Ctrl>** key at the same time; this combination will not perform the desired function.

- F05-F08: The <F05>-<F08> keys consist of the <F05>, <F06>, <F07>, <F08>, <F21>, <F22>, <F23> and <F24> keys. If the control protect function is enabled, press the <Ctrl> key in addition to the normal sequence required for the key.

If control protection is not selected, press the function keys. Do not press the <Ctrl> key at the same time; this combination will not perform the desired function.

F09-F12: The <F09>-<F12> keys consist of the <F09>, <F10>, <F11>, <F12>, <F25>, <F26>, <F27> and <F28> keys. If the control protect function is enabled, press the <Ctrl> key in addition to the normal sequence required for the key.

If control protection is not selected, press the function keys. Do not press the **<Ctrl>** key at the same time; this combination will not perform the desired function.

- F13-F16: The <F13>-<F16> keys consist of the <F13>, <F14>, <F15>, <F16>, <F29>, <F30>, <F31> and <F32> keys. If the control protect function is enabled, press the <Ctrl> key in addition to the normal sequence required for the key.

If control protection is not selected, just press the function keys. Do not press the **Ctrl>** key at the same time; this combination will not perform the desired function. Refer to Table 3-9 for Function Key Definitions.

## 3-8.8 Kbd Lock Category

If the lockout function is enabled, no action occurs upon depression of any of the affected keys. If this function is disabled, the affected keys can be used. The following sections define the keys that are affected by the lockout feature. The header for each section matches the field label on the configuration.

- **Esc**: If lockout is enabled, you cannot send an escape character or enter the local escape mode. If keyboard lock is not selected, the *KBD CTRL* option defines the action required to perform the function.
- Cursor Keys: The cursor position keys are the Home key, the , , , and (line feed) keys. If lockout is enabled, pressing the cursor keys produce no action.

If keyboard lock is not selected, the KBD CTRL option defines the action required to perform the func-

TOC

LOT

tion.

- **Tab Shift**: The **Tab>** and **Shift>** keys consist of the **Tab>** key and the **Shift>** (Backtab) key. If lockout is enabled, pressing these keys produces no action.

If keyboard lock is not selected, the Kbd ctrl option defines the action required to perform the function.

CR, LF: The Cr and LF keys consist of the Carriage Return (øEnter) key and possibly the (Line Feed) key. If lockout is enabled, pressing **Enter>** or **Ctrl> Enter>** produces no action. Note, **Ctrl>** is normally an alternate method of sending a LF character. If the SEND CRSR, EDIT field is disabled, the key is treated as a Line Feed key. Therefore, if lockout is enabled, pressing **Ctrl>** produces no action.

If keyboard lock is not selected, the KBD CTRL option defines the action required to perform the function.

TOC

- F01-F04: The <F01>-<F04> keys consist of the <F01>, <F02>, <F03>, <F04>, <F17>, <F18>, <F19>, and <F20> keys. If lockout is enabled, pressing the normal sequence required for the key produces no action.

LOT

If keyboard lock is not selected, the KBD CTRL option defines the action required to perform the function.

LOF

- F05-F08: The <F05>-<F08> keys consist of the <F05>, <F06>, <F07>, <F08>, <F21>, <F22>, <F23>, and <F24> keys. If lockout is enabled, pressing the normal sequence required for the key produces no action,

If keyboard lock is not selected, the KBD CTRL option defines the action required to perform the function.

- F09-F12: The <F09>-<F12> keys consist of the <F09>, <F10>, <F11>, <F12>, <F25>, <F26>, <F27>, and <F28> keys. If lockout is enabled, pressing the normal sequence required for the key produces no action.

If keyboard lock is not selected, the KBD CTRL option defines the action required to perform the function.

- F13-F16: The <F13>-<F16> keys consist of the <F13>, <F14>, <F15>, <F16>, <F29>, <F30>, <F31>, and <F32> keys. If lockout is enabled, pressing the normal sequence required for the key produces no action,

If keyboard lock is not selected, the KBD CTRL option defines the action required to perform the function.

#### 3-8.9 Mode Category

The options in the Mode category affect the way the software displays data. The following sections define the various modes of operation.

- **Scroll**: If the scroll option is enabled and a line feed (LF) is received while the cursor is positioned on the last line of the display, the data on the screen is moved up by one line. The top line on the screen is

scrolled into the review buffer. The last line of the display is cleared to nulls or spaces depending on the configuration.

If the scroll option is disabled and a line feed (LF) is received while the cursor is positioned on the last line of the display, the cursor moves to line 1 of the display.

- **Auto Line Feed**: If the auto line feed option is enabled, the receipt of a carriage return (CR) produces the same effect as receiving a CR/LF pair. The cursor is moved to column one and then advances down one line. If the scroll option is enabled and the cursor is on the last line of the display, the screen scrolls up one line.

If the auto line feed option is disabled, the cursor moves to column 1 of the same line when the CR is received

- **Auto Tab**: This option affects the handling of the cursor on block mode screens. If the *Auto Tab* option is enabled, the cursor automatically passes over protected fields and attributes characters.

If the auto tab option is disabled, it is necessary to manually tab past protected fields and attribute characters to access fields.

acters to access fields.

New Line: If the new line option is enabled, receiving a displayable character when the cursor is posi-

tioned to the last column on the screen, generates an automatic CR or LF sequence following the display of the character.

If the new line option is disabled, any character received replaces the character in the last column and the cursor does not move.

- Upper Case: If the upper case option is enabled, lower case characters entered at the keyboard are converted to their upper case counterparts. Lower case characters received form the host are not affected by this option. If the upper case option is disabled, no translation takes place on lower case characters entered from the keyboard.
- Inverse Video: This option is primarily intended for use on monochrome displays. If the inverse video option is enabled, dark characters are displayed on a light background.

If the inverse video option is disabled, light characters are displayed on a dark background. If you have a color display, disabling this option restores your previous selection.

- **Blink Cursor**: The PC hardware defines a blinking cursor. This is a fixed field.
- **Block Cursor**: If the block cursor option is enabled, the cursor appears as a blinking block occupying the entire character field.

If the block cursor option is disabled, the cursor appears as a blinking underline character.

In either case, the cursor assumes the color of the character it is positioned on and the character appears during the off cycle of the blink.

- **Key Click**: If the key click option is enabled, an audible click occurs upon depression of any key on the keyboard. If the key click option is disabled, keyboard operation is silent.
- Screen Save: If the screen save option is enabled, the screen blanks after a user-adjustable period of inactivity. The default screen save delay is 15 minutes. When the screen is blanked, the contents of the screen remain intact. Any keyboard operation or host transmission restores the screen. To restore the

TOC

LOT

screen without generating characters, momentarily depress the **Alt>**, **Shift>** or **Ctrl>** key. If the screen save option is disabled, characters remain displayed on the screen until the screen is manually cleared. The RDA/RPG Remote Access Terminal uses a 5 minute wait PC screen saver program. Therefore, this option is not necessary for operation.

- **Smooth Scroll**: The MDA and CGA PC video hardware does not support smooth scrolling. This is a fixed field. The contents of this field reflects the information downloaded from the host.
- Clock Display: The field is unique to the RDA/RPG Remote Access Terminal software. It is not present with the CDT-100. If the clock display is enabled, the current date and time is displayed on the upper portion of the status line. The display is suppressed if an application program writes data to the message portion of the status line. When that field is cleared, the time displays again. If the clock display is enabled, you can select the format of the display with the <Alt>D key while you are in the configuration mode. If the clock display option is disabled, the date and time are not displayed. The update of the date and time display is a low priority function. When the terminal is busy displaying data from the host, it does not duplicate the clock display. Note also that the design of the time of day clock in the PC is inherently inaccurate, so the time display will not stay synchronized with a watch or wall clock.

# TOC

## 3-8.10 System Category

The options in the system category affect the way the terminal software interacts with the RDA or RPG host computer. The following sections define the various modes of operation.

LOT

- **Send Stat Line**: If the send stat line option is enabled in block mode, the block mode send function is allowed when the cursor is positioned on the status line. In conversational mode, data is sent to the host on a character by character basis.

LOF

If the send stat line option is disabled, no communication is allowed with the host computer from the status line.

- **Dsplay Stat Ln**: If the display status line option is enabled, the status line is displayed on the last line of the screen.

If the display status line option is disabled, the status line is not displayed.

Regardless of the setting of this field, the status line always displays when entering the screen program mode, the configuration mode or whenever a terminal error or keyboard lock occurs.

Pwr Up On Line: If the power up on line option is enabled, and Application Software or Systems Console is started with no commands on the start command line, the terminal automatically proceeds to the connect mode. Do not disable the power up on line option. The Application Software or Systems Console will enter the local (LOC) mode instead of communicating with the host.

In local mode, no data is transmitted to the host. Data received from the host is buffered and displayed as soon as you exit the local mode. Keyboard entries are acted upon as if they were received from the host. The terminal can be placed into or removed from the local mode by depressing the **Shift><Alt>L** keys simultaneously. In local mode, data terminal ready (DTR) remains active.

Return = Send: This option affects block mode operation. If *Return* = *Send* is enabled, the **Enter**> key sends data to the host the same as the **End**> (Send) key.

If Return = Send function is disabled, no data is transmitted and the cursor is placed at the beginning of the line when the **Enter>** key is depressed.

- **60 HZ**: The PC video hardware does not support changing the refresh rate. The terminal software ignores the state of the 60 HZ field. You cannot make changes to this field in the configuration mode. This is a fixed field.
- Clear to Spaces: If the clear to spaces option is enabled, the terminal screen is cleared to spaces.

If the clear to spaces option is disabled, the terminal screen is cleared to nulls.

The respective clear character is also used by any action that removes characters from the screen like delete or erase functions.

Send Crsr, Edit: If the send cursor and edit option is enabled, the terminal software transmits the associated multi-code sequence to the host computer and does not perform any local action. The host computer must echo the multi-code sequence before the desired action occurs. For example, if the

depressed, a multi-code "A" sequence is transmitted to the host computer. If the responds by transmit-

ting a multi-code A sequence back to the software, the cursor moves  $\uparrow$  up one line.

ne. TOC

If the send cursor and edit option is disabled, the depression of the cursor and edit keys cause the action to take place locally. Note, the down arrow ( $\psi$ ) key is treated as a Line Feed (LF) when this option is disabled, and it sends a LF code to the host.

LOT

- **Send Clear All**: If the send clear all option is enabled, the terminal transmits a request to send sequence to the (RDA or RPG) host when the **<Alt>C** key is pressed. After the host responds with a read request, the screen is cleared. If the host does not respond with a read request, the screen is not cleared.

LOF

If the send clear all option is disabled, the screen is cleared locally when the **Alt>C** key is pressed. In this case the host is not notified that the screen has been cleared.

## 3-8.11 Comm Category

The options in the Comm category affect the way the terminal communicates with the host computer (RDA or RPG). The following sections define the various modes of the emulation. The header for each section matches the field label on the configuration screen.

- **Block**: If the block mode is enabled, the terminal enters block mode as soon as you exit the configuration mode. Also, with this option enabled, the terminal enters the block mode each time it is started.

In block mode, data is sent to the host by pressing a function key or the End(send) key. If *Return* = *Send* is enabled, the **Enter**> key also initiates a host transmission.

If the block option is disabled, the terminal operates in conversational mode. In conversational mode, data is sent to the host on a character by character basis.

- **Polled**: The terminal software does not support a polled environment. The software ignores the state of this field. Changes cannot be made to this field in the configuration mode.
- **One Stop Bit**: If the one stop bit option is enabled, the terminal software adds one stop bit to the end of each character transmitted.

If the one stop bit is disabled, the terminal software adds two stop bits to the end of each character transmitted.

- **Half Duplex**: If the half duplex option is enabled, all keyboard input is displayed on the screen and sent to the host computer. If the host computer and the keyboard generate a character at the same time, both characters are displayed.

In the half duplex option, the terminal software operates in full-duplex mode. In the full-duplex mode all keyboard input is transmitted to the host computer without displaying locally. The host computer must echo the data before you will see a display. Disable the *Half Duplex* option when you use the RDA/RPG Remote Access Terminal.

- **Null Supp Unformt**: If null suppression unformatted is enabled, nulls are suppressed in transmission of an unformatted screen. An unformatted screen is one that does not contain attributes. This is useful when the *CLEAR TO SPACES* option is disabled.

If the null suppression unformatted is disabled, nulls are not suppressed in transmission of an unformatted screen.

Null Supp Formt: If null suppressed formatted is enabled, nulls are suppressed in transmission of a formatted screen. A formatted screen is one that contains attributes. This option is useful when the *Clear to spaces* option is disabled.

TOC

If the null suppression formatted option is disabled, nulls are not suppressed in transmission of a formatted screen

LOT

- XON/XOFF: if the XON/XOFF option is enabled, the host computer (RDA or RPG) has the option of sending an XOFF character to the terminal to pause transmission. The terminal makes no further transmission until it receives the XON character or the 20 second XOFF time-out expires. The XOFF and XON characters are defined by the *Pause Char* and *Resume Char* fields respectively. The terminal's internal buffers holds up to 4 KB of data. When this option is enabled, the terminal stops the host's transmission by sending an XOFF as its internal buffers approach 75% of full. The terminal sends an XON as the buffers empty below 25%. You should enable this option if your PC cannot keep up with the data from the host.

LOF

This option should be enabled for RPG Applications, RPG Systems Console, and RDA Systems Console. This should not be enabled for RDA Applications.

- **113J** (**No CD Req**): If the 113J option is enabled, the software does not require the carrier detect signal to be present to receive data. Enable this option when using autodial modems, because the carrier signal is not present until the call completes.

If the 113J option is disabled, carrier detect must be present for the software to function. If carrier detect is not present, any data received from the host is discarded and No Carrier (NC) is displayed momentarily on the status line. If you are not able to communicate with the host computer on a direct connect line, enable this option, the cable you are using may not be supplying the carrier detect signal.

#### 3-8.12 Printer Category

The header for each section matches the field label on the configuration screen.

- **Line Drawing**: If the line drawing option is enabled, graphics characters are transmitted to the printer. Note, for the graphics characters to print properly, the printer must be capable of printing a PC character set. If a non standard is being used, disable this option.

If the line drawing option is disabled, attribute characters and graphics characters are converted to spaces before they are transmitted to the printer.

- Ready (-): Since the RDA/RPG Remote Access Terminal prints to a parallel port, this option has no significance. The terminal software ignores the state of the ready field. You cannot make changes to this field in the configuration mode. The contents of this field reflect the information downloaded from the host.
- **One Stop Bit**: Since the RDA/RPG Remote Access Terminal prints to a parallel port, this option has no significance. The terminal ignores the state of the one stop bit field. Changes cannot be made to this field in the configuration mode. The contents of this field reflect the information downloaded from the host.
- **Print Device**: The default value is LPT1. (LPT1 is not currently used.)

## 3-8.13 Com Category

The options in the Comm category affect the way the terminal software communicates with the host computer through the PC's serial port. The header for each section matches the field label on the configuration screen. Options in this category are selected from a list of option settings shown immediately to the right of the entry field.

- **Line, Msg, Page**: Select the type of the send condition by entering *Line, Msg, or Page* in the inverse field of the option. This selection is not case sensitive.

If the selection is Line, the line of data of which the cursor is located is sent to the host upon pressing the **End>** (send) key.

If the selection is Msg, data is sent to the host starting with the character following the end of the previously sent message or with the start of page. The data transmission ends with the character preceding the cursor position. This transmission takes place when you press the **End>** (Send) key.

If the selection is Page, an entire screen of data is transmitted to the host when the End (Send) key is depressed.

Non, Odd, Evn, Mrk, Spc: Select the type of parity by entering Non, Odd, Evn, Mrk or Spc in the inverse field of the option. This selection is not case sensitive. This option selects the parity used while sending or receiving data.

Selecting Even (Evn) parity specifies the line runs with 7 data bits and even parity. Selecting Odd parity specifies the line runs with 7 data bits and odd parity. Space (Spc) parity resets the eighth (parity) bit and Mark (Mrk) parity sets the eighth bit. If you select Even, Odd, Space or Mark, the host *must* match your selection. If the incoming parity does not match, you receive a warning beep and the status line shows PAR ERR.

Selecting None (non) allows complete data transparency. The incoming data can have any combination of parity or non-parity.

Note, regardless of the parity setting, the terminal software always detects overrun (OVR ERR) or framing (FRM ERR) errors when it is using the serial port hardware.

Speed - 300 through 57.6K: The speed option selects the speed (in bit per seconds -BPS) used by the terminal software to send and receive data. The highest rate is 57.6K (57,600 BPS) for hardware lines and 38.4K for INT 14 support. The speed must correspond with the rate expected by the RDA/RPG Remote Access Terminal.

The speed is selected by entering one of the following BPS settings in the inverse field of the option. The allowed values are:

TOC

LOT

300 600 1200 2400 4800 9600 19.2K 38.4K 57.6K

The speed defined in the configuration file is the default when the terminal starts.

## 3-8.14 Prt Category

The options in the Prt category affect the way the terminal software communicates with the printer that is attached to the port specified in the Print Device field of the configuration screen. Since the terminal software uses a parallel printer port on the terminal, most of these options do not apply. The header for each section matches the field label on the configuration screen. Options in this category can be selected from a list of option settings shown immediately to the right of the entry field.

Line, Msg, Page: Select the type of the print condition by entering *Line*, Msg, or Page in the inverse field of the option. This selection is case insensitive.

If the selection is Line, the line of data where the cursor is located is sent to the print device when the **Shift><Print Scrn>** key is depressed.

If the selection is Msg, upon depression of the **Shift><PrintScrn>** key, data is sent to the printer starting with the character following the end of the previously sent message or with start of page and ending with the character before the cursor position.

If the selection is Page, the entire screen of data is sent to the printer when you press the **Shift><PrintScrn>** key.

Non, Odd, Evn, Mrk, Spc: Since the terminal software prints to a parallel port, this option has no significance. This is a fixed field. The contents of this field reflect the information downloaded from the host.

## 3-8.15 Terminator Category

Define the terminators by entering from one of four characters in the inverse field preceding each option. The cancel (CAN) character, generated by pressing **Ctrl>X**, terminates the definition and is not sent to the host. If no terminator is desired, enter four CAN characters. If the current setting is acceptable, tab to the next option field. The header for each section matches the field label on the configuration screen.

Once you are in Configuration Setup (after pressing <Shift><Alt>C), you can press <Alt>H to get help on terminators. Press <Alt>H once again to exit help.

- Send Line: The send line terminator is appended to each line sent to the host using the send line mode on both formatted and unformatted screens. It is also appended to the end of define function key messages unless the Here is definition is set to SLT which suppresses this action. Setting the Here is definition to SLT allows the Send Line terminator for block mode functions and prevents interference with your Conversational mode function key definitions. The default send line terminator is CAN CAN CAN CAN (<Ctrl>X <Ctrl>X <Ctrl>X).
- Field: The field terminator is appended to each field sent to the host for formatted screens. The default field terminator is GSP CAN CAN (<Ctrl>] <Ctrl>X <Ctrl>X <Ctrl>X).
- Unformat line: The unformatted line terminator is appended to each line sent to the host for the send message and send page modes on unformatted screens. The default unformatted line terminator is CAN CAN CAN CAN (<Ctrl>X <Ctrl>X <Ctrl>X <Ctrl>X).
- Unformat Pg: The unformatted page terminator is appended to each message or page sent to the host

TOC

LOT

when using the send message or send page mode on unformatted screens. The default unformatted page terminator is ETX CAN CAN (Ctrl>C <Ctrl>X <Ctrl>X <Ctrl>X).

- Format Pg: The formatted page terminator is appended to each message or page sent to the host when using the send message or send page mode on formatted screens. The default formatted page terminator is ETX CAN CAN (Ctrl>C <Ctrl>X <Ctrl>X <Ctrl>X).
- Req to Send: The request to send terminator is appended to each transmission of a request to send multi-code sequence. This includes the transmission that results when you press a function key that is not defined. The default send line terminator is CAN CAN CAN CAN (<Ctrl>X <Ctrl>X <Ctrl>X).
- **Print Line**: The print line terminator is appended to each line of data that is sent to your PC's printer port. The default send line terminator is CR LF CAN CAN CAN CAN CAN CAN (**Ctrl>M Ctrl>J Ctrl>X Ctrl>X Ctrl>X Ctrl>X Ctrl>X**.

## 3-8.16 Splc Char Category

Define these special characters by entering a single character in the inverse field preceding the action. The header for each section matches the field label on the configuration screen.

- **Multi-code Char**: The multi-code character is a fixed field.
- **Poll Char**: The terminal software does not support a polled environment. This is a fixed field. The contents of this field reflect the information downloaded from the host.
- Pause Char: Specify the pause character by entering the desired character in the inverse field preceding the option. To select the default pause character enter a < Ctrl>S.

Specify a pause character to allow flow control to function. This character must correspond to the pause character expected by the host. The **<Ctrl>S** character is the default pause character expected by all OS/32 software. The terminal software sends the pause character (XOFF) when its buffer becomes full. If the terminal software receives the pause character, it stops transmitting characters to the host until it receives the resume character.

- **Resume Char**: Specify the resume character by entering the desired character in the inverse field preceding the option. To select the default resume character enter a **<Ctrl>Q**.

Specify a resume character to allow flow control to function. This character must correspond to the resume character expected by the host. The **<Ctrl>Q** character is the default resume character expected by all OS/32 software. The terminal software sends the resume character (XON) when its buffer becomes empty after it has sent a pause character. If the terminal software receives the resume character, it resumes transmitting characters to the host if it had previously received a pause character.

- **Ring Bell**: Specify the ring bell column by entering three decimal digits (in preparation for 132 column mode), in the inverse field preceding the option. While entering data from the keyboard, the bell sounds when the cursor enters the designated column. This option is equivalent to a typewriter bell that sounds just before the right margin is reached.

The ring bell field offers many options. There are several methods of disabling it. For a column number greater than the terminal width, the bell will not sound as data is entered, but it will sound upon receipt of a bell code from the host. With 000, the bell will not sound even when a bell code is received.

TOC

LOT

#### 3-8.17 Configuration file =

This field allows specification of the name of the configuration file. The terminal software saves the current configuration data to this field when the configuration mode is exited with the **Alt>C** key. The filename can be up to twelve alphanumeric characters in length, including a three character extension (e.g., Passport.CM3 and Passport.CM4)

## 3-8.18 Function Keys Category

- Here is = : Designate any of the 32 function keys (<F01>-<F32>) or the number pad keys (NP/, NP\*, NP-, NP+) as the here is key. The message defined for that key is transmitted in response to an ENQ (enquiry) from the host. Designate a function key as the here is key by entering the upper case letter <F> and the two digit number of a function key (leading zeros must be entered) in the inverse field preceding the option.

Setting the *Here is* = definition to SLT has special significance. It disables the Here is function and suppress adding the Send Line Terminator string to the end of define function keys definitions when they are sent. This capability allows the send Line Terminator for your block mode functions and not to interfere with your conversational mode function key definitions.

TOC

Disable the Here is option by filling the field with CAN CAN (**Ctrl>X Ctrl>X Ctrl>X**). Also, if you specify a function key that is not defined, the terminal software does not respond to an ENQ from the host.

LOT

#### 3-9 REMOVAL AND REPLACEMENT PROCEDURES

## LOF

## 3-9.1 Remove and Replace Procedures for PC in the UCP Position (UD34A9)

Unpacking the new terminal

Prior to shipment, your terminal is inspected, tested, and carefully packaged. Read and follow the procedures listed below before unpacking the terminal.

- (1) Inspect each carton for any special unpacking or handling instructions.
- (2) Carefully remove each component from its carton. Save the carton and packing material for future relocation and service.
- (3) Verify that each item on the sales order packing list is included in the shipment.
- (4) Visually inspect the terminal, monitor, and keyboard for the following:
  - a. Panel surfaces for damage (i.e., dents, paint scratches, cracks, and wraps).
  - b. Cables and connectors for any damage.
  - c. Screen and keytops for cracks or scratches.
- (5) Perform a mechanical inspection of all operating switches, controls, and keyboard switches for smooth operation.

Repacking the old terminal

Before repacking the terminal for relocation or service, perform the following steps:

- (1) Ensure that you include all hardware necessary for operation.
- (2) Record the serial number of the terminal for reference.
- (3) Carefully pack the terminal and associated hardware in the original packing material, and place them in the carton.

Tools required:

Screwdriver set, flat-tip

## Diagonal Pliers (Wire-cutters)

- 1. Perform the following Radar Product Generation (RPG) shutdown procedures:
  - a. Verify that the Application RPG Main menu is displayed by pressing **F1** at the RPG Application Terminal, and note any RPG alarms present for later equipment checkout.
  - b. At the RPG Main Menu enter **ST,A<Enter>** to ensure Archive III is idle. If Archive III is not idle, enter **AR,C,A<Enter>** to disable Archive III.
  - c. Terminate the Application Software by performing the following steps:
    - (1) Enter **U,SH,O<Enter>** at the RPG main menu, and verify that RPG SHUTDOWN is displayed, and proceed to step 1c(2). If RPG SHUTDOWN is not displayed, perform the following steps:

TOC

(a) Press **Alt>** and **Tab>** keys simultaneously or use the mouse to access RPG System Console.

LOT

(b) At the \* prompt, enter **RPGSTOP**<**Enter>** and verify RPG: END OF TASK 0 is displayed.

- (c) If RPG: END OF TASK 0 is not displayed, enter **RPG ABORT<Enter>** and wait for the message THERE NOW DON'T WE FEEL BETTER?.
- (2) At the RPG System Console, enter **D TA<Enter>** and observe that no tasks are found. If tasks are found proceed to the next step. If no tasks are found proceed to step 1.c.(4).
- (3) At the RPG System Console, enter **CA**taskid**<Enter>** to cancel each remaining task.
- (4) At the RPG System Console, enter **ERR LOG,OFF**<**Enter>** to mark log off.
- (5) At the RPG System Console, enter **MA DSC0:,OFF<Enter>** to mark disk 0 off.
- (6) At the RPG System Console, enter **D D/D<Enter>** and verify that all disks are marked off.
- (7) Press the **Ctrl>** and **V** keys together twice to enter the Control Diagnostics system, then press the **Enter>** key until the CDS> prompt is displayed.
- (8) At the CDS> prompt, enter **KEY 1**, password **Enter>**.
- (9) At the CDS> prompt, enter **HA<Enter>**.
- (10) At the CDS> prompt, enter **PO OFF<Enter>**.
- (11) At the CDS> prompt, enter **PO ON,FP12<Enter>** to return power to the RPG cabinet fans.

- (12) At the CDS> prompt, enter **STA 1,28<Enter>** to verify that power to the RPG cabinet is off.
- (13) Press **Alt>X** twice to exit the Systems Console.
- (14) Press **Alt>X** twice to exit the Applications Software.
- (15) At the Windows 95 Tool Bar, select **pcANYWHERE Waiting** and **Cancel**.
- (16) At the Main Menu, select **Start** and **Shutdown**. Choose to **Shutdown the computer**. This will close Windows 95.
- (17) Verify that the Power On Indicator Light goes out.
- (18) At the Monitor, set the power switch to the **OFF** position. Verify that the Monitor Power On Indicator Light goes out.
- TOC

(19) Turn **OFF** power to the surge suppressor (ISOTEL4, UD34E1).



- (20) Disconnect the keyboard cable from the rear of the CPU terminal. Remove the keyboard and set aside.
  - LOF
- (21) Disconnect the mouse cable from the rear of the CPU and set the mouse aside.
- (22) Remove the power cord from the rear of the CPU terminal and retain in place.
- (23) Remove the COMM3 (EIA) port cable from the rear of the CPU leaving the 9 to 25 serial adapter connected to the cable and retain in place.
- (24) Remove the COMM4 (AUX) port cable from the rear of the CPU leaving the 25 to 25 null modem connected to the cable and retain in place.
- (25) Disconnect the Telco cable connected to the TELCO modem port.
- (26) Disconnect the monitor video cable from the rear of the CPU.
- (27) Remove the monitor power cable from the monitor and retain in place.
- (28) Remove the monitor and set aside
- (29) Remove the CPU and set aside.
- d. Perform the following steps to install the new RDA/RPG Remote Access Terminal:
  - (1) Position the new CPU on the UCP stand desk area.
  - (2) Reposition the monitor on the shelf assembly directly above the CPU.
  - (3) Reconnect the CPU monitor video cable to the CPU monitor connector.
  - (4) Reconnect the mouse to the CPU mouse jack. (Green upper port)

- (5) Reconnect the keyboard to the CPU keyboard jack. (Orange lower port)
- (6) Reconnect the CPU power cord between the CPU and the surge suppressor (Isotel4).
- (7) Reconnect the telco cable to the TELCO modem port on the CPU terminal.
- (8) Reconnect the Monitor Power cord to the monitor.
- (9) Reconnect the COMM3 EIA cable with the serial adapter to the CPU terminal.
- (10) Reconnect the COMM4 AUX cable with the null modem to the CPU.
- (11) Turn **ON** the surge suppressor (Isotel4, UD34E1).
- (12) Verify power is **ON** the new CPU assembly (UD34A9).
- (13) Turn **ON** the monitor (UD34A10).
- (14) After the system completes its configuration (may take a few minutes), use the mouse or press **Alt><Tab>** to select the Systems Console program window.
- (15) At the Systems Console, press **Enter>** and observe that the CDS> prompt is displayed. You may have to press **Enter>** several times.
- (16) At the CDS> prompt, enter **KEY 1**, password **Enter>**.
- (17) At the CDS> prompt, enter **PO ON<Enter>**. It may take a few minutes for the Applications Software to display.
- (18) If the Applications Software Main Menu is only partially displayed press **Ctrl><Break>** to begin normal operations.

## 3-9.2 Remove and Replace for the PC in the RDA MMI Position (UD5A32)

Unpacking the terminal for replacement:

Prior to shipment, your terminal is inspected, tested, and carefully packaged. Read and follow the procedures listed below before unpacking the terminal.

- (1) Inspect each carton for any special unpacking or handling instructions.
- (2) Carefully remove each component from its carton. Save the carton and packing material for future relocation and service.
- (3) Verify that each item on the sales order packing list is included in the shipment.
- (4) Visually inspect the terminal, monitor, and keyboard for the following:
  - a. Panel surfaces for damage (i.e., dents, paint scratches, cracks, and wraps).
  - b. Cables and connectors for any damage.
  - c. Screen and keytops for cracks or scratches.
- (5) Perform a mechanical inspection of all operating switches, controls, and keyboard switches for smooth operation.

Repacking the terminal:

Before repacking the terminal for relocation or service, perform the following steps:

TOC

LOT

- (1) Ensure that you include all hardware necessary for operation.
- (2) Record the serial number of the terminal for reference.
- (3) Carefully pack the terminal and associated hardware in the original packing material, and place them in the carton.

## Tools required:

- Screwdriver set, flat-tip
- Diagonal Pliers (Wire-cutters)

#### Note

It is possible that the CPU may have experienced such a fatal problem as disk crashing that may not allow you to perform a normal shut down prior to replacement. Proceed to step 2 of this has happened.

1. Perform the following RDA shutdown procedures:

TOC

- a. Ensure that the RDA Applications Main menu is displayed by entering **MAIN**<**Enter>** on the command line, and note any RDA alarms present for later equipment checkout.
- LOT

- b. Request RDA local control by entering **RELC<Enter>** on the command line.
- c. Verify Archive II is not recording. If Archive II is in the RECORD state enter **ARCH** on the command line and **D** in the parameter line and then press the **Enter>** key to turn OFF Archive II recording. Wait until the status changes to INSTALLED.

- d. Verify that the RDA state is STANDBY. If not, enter **STBY**<**Enter>** on the command line.
- e. Enter **TERP<Tab right>** in the command line and *password*<**Enter>** in the parameters area.
- f. Simultaneously press the **Alt>** and **Tab>** to access to the RDA System Console, and wait until the message TASK02: END OF TASK 255 is displayed. Verify that the \* prompt is displayed. If the \* prompt is not displayed, enter CO<Enter> and reverify that the \* prompt is displayed.
- g. At the \* prompt, enter **D TA<Enter>** and verify that TIME is the only active task. If other tasks are found, enter **CA** *taskid***<Enter>** to cancel all other tasks.
- h. At the \* prompt, enter **ERR LOG,OFF**<**Enter>** to mark log off.
- i. At the \* prompt, enter **MA DSC0:,OFF<Enter>** to mark disk 0 off.
- j. At the \* prompt, enter **D D/D**<**Enter>** and verify that all disks are marked off.
- k. Press the **<Ctrl>** and **V** keys together twice to access the Control Diagnostics System.
- 1. Press the **Enter>** key until the CDS> prompt is displayed.
- m. At the CDS> prompt, enter **KEY 1.** password **Enter>**.
- n. At the CDS> prompt, enter **HA<Enter>**.

- o. At the CDS> prompt, enter **PO OFF<Enter>**.
- p. At the CDS> prompt, enter **PO ON,FP12<Enter>** to return power to the RDA cabinet fans.
- q. At the CDS> prompt, enter **STA 1,28<Enter>** to verify that 5 volt power supplies in the RDA cabinet (P5 and P5U) are off.
- r. Press **Alt>X** twice to exit the Systems Console window.
- s. Press **Alt>X** twice to exit the Applications window.
- t. At the Windows 95 Tool Bar, select **pcANYWHERE** and select **Cancel**, to close pcANYWHERE.
- u. At the Windows 95 Tool Bar, select **Start**, **Shutdown**, then choose **Shutdown the Computer**. This closes Windows 95.
- TOC

- v. Verify that the Power On Indicator light goes off.
- w. At the monitor, set the power switch to the **OFF** position, and verify that the Power On Indicator light goes off.
- LOT
- 2. Perform the following RDA/RPG Remote Access Terminal Man Machine Interface (MMI) Removal/Replacement procedures:
- LOF

- a. Turn **OFF** power to the Surge Suppressor (Isotel4, UD5E1).
- b. Disconnect the keyboard cable from the rear of the CPU, and set aside.
- c. Disconnect the mouse cable from the rear of the CPU, and set aside.
- d. Disconnect the power cord from the rear of the monitor and retain in place.
- e. Disconnect the COMM4 AUX port cable leaving the null modem attached to the cable from the rear of the CPU and retain in place.
- f. Disconnect the COMM3 EIA port cable leaving the 9 to 25 pin serial adapter attached to the cable from the rear of the CPU and retain in place.
- g. Disconnect the TELCO cable from the TELCO modem jack on the rear of the CPU, and retain in place.
- h. Disconnect the Monitor Video Cable from the rear of the CPU, and set aside.
- i. Remove the PC monitor (UD5A33), and set aside.
- j. Disconnect the power cord from the rear of the CPU, and retain in place.
- k. Remove the CPU (UD5A32) and return to the NRC.
- 3. Install the new RDA/RPG Remote Access Terminal by performing the following steps:

#### Note

The AB switch referenced in the following step is optional, and will not be found at all sites.

- a. Position the replacement CPU on the RDA MMI shelf as far forward as possible, it may be necessary to tilt the CPU and move the AB switch to allow the CPU to fit into the cabinet between the front and middle rails.
- b. Position the PC monitor on top of the CPU as far back as possible.
- c. Position the mouse on the top of the CPU towards either side. (Users preference)
- d. Position the keyboard on the CPU as far forward as possible.
- e. Reconnect the TELCO cable to the TELCO port of the modem, on the back of the CPU.
- f. Reconnect the COMM3 EIA port cable with the 9 to 25 pin serial adapter and attach to the back of the CPU.
- g. Reconnect the COMM4 AUX port cable with the null modem and attach to the back of the CPU.
- h. Reconnect the PC monitor video cable to the CPU video jack. (Reference Figure 2-2 RDA/RPG Remote Access Terminal (CPU) Back Panel)
- i. Reconnect the mouse to the CPU mouse jack (green upper port).
- j. Reconnect the keyboard to the CPU keyboard jack (orange lower port).
- k. Reconnect the CPU power cord between the CPU and the surge suppressor (Isotel4, UD34E1).
- 1. Reconnect the PC monitor power cord to the rear of the monitor.
- m. Turn **ON** the Surge Suppressor (Isotel4, UD5E1).
- n. Verify the CPU Power On indicator is lit.
- o. Turn **ON** the RDA MMI monitor (UD5A33).

## Note

The RDA/RPG Remote Access Terminals shipped are configured for the UCP. When viewing the Applications window, and System Console window, the names are reversed. The following steps will direct you to change the titles to reflect the correct configurations.

#### Note

Your replacement installation will not be successful if you do not perform the following steps.

- q. After the terminal software is displayed (both the Applications window and the System Console window are blank) perform the following steps:
  - (1) Highlight the Applications window, by pressing **Alt>**Tab> or by using the mouse.

TOC

LOT

- (2) Press **Shift> Alt> C** to enter into the Terminal Parameter Configuration Screen.
- (3) Change Block Mode to  $\mathbf{N}$  for NO.
- (4) Press **Alt>C** to save and exit the Terminal Parameter Configuration Screen.
- (5) Verify that you are in CDS> by pressing **Enter>** until the CDS> prompt is displayed.
- (6) Return power to the RDA by entering **PO ON<Enter>** at the CDS> prompt on the APPLICATIONS.
- (7) Position the mouse cursor on the APPLICATIONS window title bar.
- (8) Click on the **title bar** with the RIGHT mouse button to bring up a POP-UP Menu.
- (9) Click on the **Properties** option.

TOC

(10) Change the Program Title Property from APPLICATIONS to *System Console*, and click on **OK**.

LOT

#### Note

At this time, two System Console title bars are present. Choose the top System Console window in the next step.

- (8) Position the mouse cursor on the SYSTEM CONSOLE window title bar.
- (9) Click on the top **SYSTEM CONSOLE** Title Bar with the RIGHT mouse button to bring up a POP-UP Menu, and click on the **PROPERTIES** option.
- (10) Change the Program Title Property from SYSTEM CONSOLE to Applications, and click on  $\mathbf{OK}$ .
- (11) Press **<Alt>X** twice to close the APPLICATIONS window.
- (12) Press **Alt>X** twice to close the SYSTEM CONSOLE window.
- (13) At the Windows 95 tool bar, using the mouse, RIGHT click on the **Start** button then select **Open**.
- (14) At the Windows Startup dialog box, use the mouse and select the **PROGRAMS** icon, then select the **STARTUP** icon.
- (15) Using the mouse, highlight the **Applications** icon.
- (16) Select **File**, **Rename** and enter *System Console*, and then press **Enter>**.
- (17) Using the mouse, highlight the original **System Console** icon.
- (18) Select **File**, **Rename** and enter *Applications*, then press **Enter**>.

- (19) Using the mouse, click on the  $\mathbf{X}$  in the upper right hand corner of the Windows Startup dialog box, to close the application.
- (20) At the Windows 95 task bar, select **Start**, **Programs**, **Startup**, and then **Applications**.
- (21) At the Windows 95 Tool Bar, select **Start**, **Programs**, **Startup**, and then **System Console**.
- (22) Observe that the Applications, and System Console are displayed.
- (23) If the Applications Main Menu is only partially displayed, press **<F1>** to begin normal operations.

## 3-9.3 Removal and Replacement of the Monitor for the UCP and the RDA MMI Positions

- 1. At the Applications window, press **Alt>X** twice to exit the Applications window.
- 2. At the Systems Console window, press **Alt>X** twice to exit the Systems Console window.
- 3. At the Windows 95 Tool Bar, select **pcANYWHERE** and then select **Cancel**. This closes pcANYWHERE.
- LOT

**TOC** 

- 4. At the Windows 95 Tool Bar, select **Start**, **Shutdown** and then select **Yes**. This will shut down the PC.
- LOF

- 5. Verify that the CPU Power On Indicator is not lit.
- 6. Turn **OFF** power to the monitor.
- 7. Turn **OFF** power to the surge suppressor (ISOTEL4).
- 8. Disconnect the monitor power cord from the rear of the monitor, and retain in place.
- 9. Remove the CPU monitor video cable from the CPU.
- 10. Remove the old monitor, and replace with a new monitor.
- 11. Reconnect the CPU monitor video cable to the CPU.
- 12. Reconnect the power cord to the monitor.
- 13. Turn **ON** power to the surge suppressor (ISOTEL4).
- 14. Turn **ON** the power to the monitor by pressing the power monitor switch. Verify that the Power On Indicator is lit.
- 15. Verify that the Power On Indicator is lit.
- 16. After the system completes its configuration, you should see the Systems Console, and Applications along with pcanywhere waiting. Use the mouse or <a href="Alt><Tab">alt><Tab</a> to select the Systems Console and then press <a href="Enter">Enter</a> until the \* prompt is displayed. You may have to press F1 or <a href="Ctrl">Ctrl</a> Preak > to refresh the Applications window at the RDA MMI or the UCP

respectively.

## 3-9.4 Removal and Replacement Procedures for the Keyboard and Mouse.

- To replace the keyboard. It is relatively simple. The system can be running while replacing the keyboard.
  - Remove the Keyboard from the PC and set aside. a.
  - Reconnect the new cable for the Keyboard to the PC, and resume normal operations. b.
- 2. To replace the mouse. The system cannot be running while replacing this component.
  - At the Applications window, press **Alt>X** twice to exit the Applications window. a.
  - b. At the Systems Console window, press **Alt>X** twice to exit the Systems Console window.
  - At the Windows 95 Tool Bar, select **pcANYWHERE** and then select c. Cancel. This closes pcANYWHERE.

TOC

d. At the Windows 95 Tool Bar, select **Start**, **Shutdown** and then select **Yes**. This will shut down the PC.

LOT

- Verify that the CPU Power On Indicator is not lit. e.
- f Disconnect the mouse cable from the CPU and set the mouse aside.
- Reconnect the new mouse to the CPU. (Green upper port) g.
- Turn ON the CPU. Verify that the Power On Indicator is lit. h.
- i. After the system completes its configuration, you should see the Systems Console, and to select the **Systems Console** and then press **Enter>** until the \* prompt is displayed. You may have to press F1 or <Ctrl><Break> to refresh the Applications window at the RDA MMI or the UCP respectively.

#### 3-10 USING ANOTHER PC OR LAPTOP PC FOR REMOTE ACCESS

## 3-10.1 Installing pcANYWHERE on Another PC or Laptop PC

## Minimum Requirements:

- 386 or higher microprocessor
- 4 MB RAM
- VGA or higher resolutions display adapter
- Hard disk drive, one CD-ROM drive
- At least 20 MB free disk space

## Recommended Hardware:

- 28.8k or better modem
- 486, Pentium, or higher microprocessor
- 8 MB RAM or higher
- 20 MB free disk space

## Required Software:

- Windows 95 Version 4.00 950B or Version 4.00 950

## 3-10.2 pcANYWHERE32 Software Installation on Another PC or Laptop PC

#### NOTE ON LICENSING

You are entitled to use pcANYWHERE32 on four computers including the equipment installed in the UCP position, the equipment installed in the RDA MMI position, and if necessary, two other computers used for remote access.

You have been provided two pcANYWHERE CD-ROMs for software restoral, if it becomes necessary. Use one for installation on another PC or laptop PC to be used for remote access.

- 1. Make sure that Windows 95 is running on your computer and all other software is closed.
- 2. Insert the pcANYWHERE32 CD-ROM into your computer's CD-ROM drive.
- 3. Perform one of the following procedures:
  - For the terminals provided for remote access (UCP Position and the RDA MMI Position), Windows Autoplay is enabled. If Windows Autoplay is enabled for your other PC or Laptop PC:
    - Click **Install Software** on the pcanywhere CD-ROM installation utility screen.
  - If you are installing pcANYWHERE32 on another PC or Laptop PC and Windows Autoplay is not enabled, choose **RUN** from the Windows 95 Start menu and type *D:\cdinst.exe* in the Open text box. Select **OK** and follow the on screen instructions.

#### Note

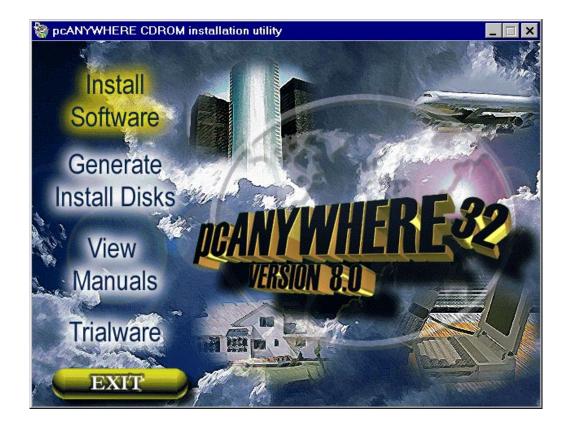
Your CD-ROM may not be located on the D: drive. Enter the appropriate CD-ROM drive for your computer.

TOC

LOT



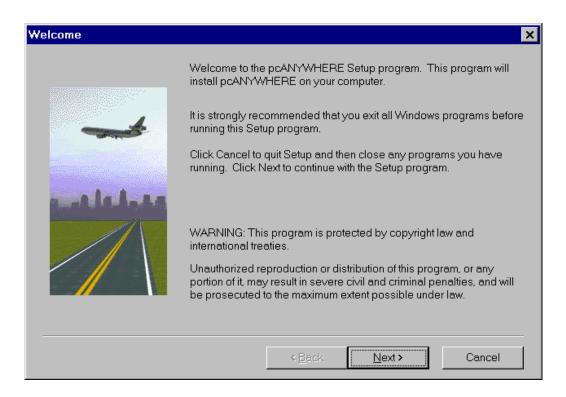
4. Using the mouse select **Install Software**.



TOC

LOT

5. At the Welcome dialog box select **Next**.

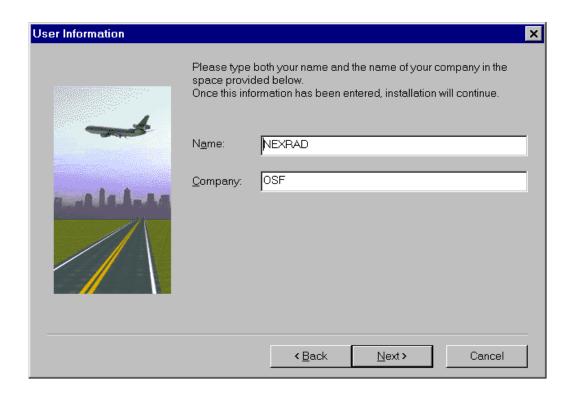


TOC

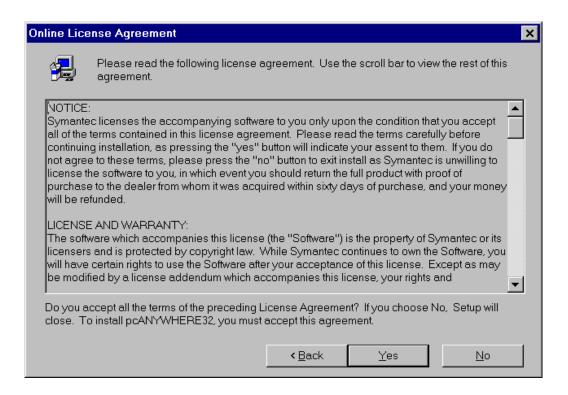
LOT

LOF

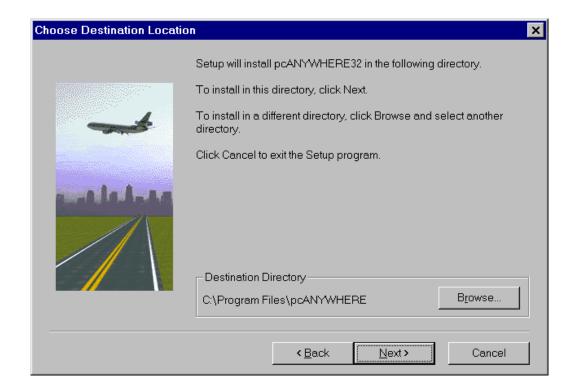
6. At the User Information text box type NEXRAD for Name and OSF for Company and select Next.



7. At the Online License Agreement dialog box select Yes.



8. Verify the destination directory is c:\Program Files\pcANYWHERE and select **Next**.



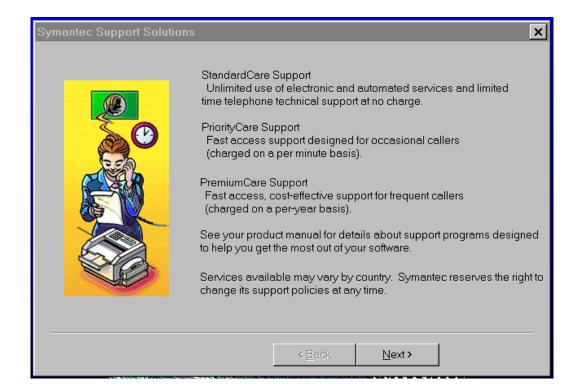
TOC

LOT

9. At the Setup Review dialog box select Next.



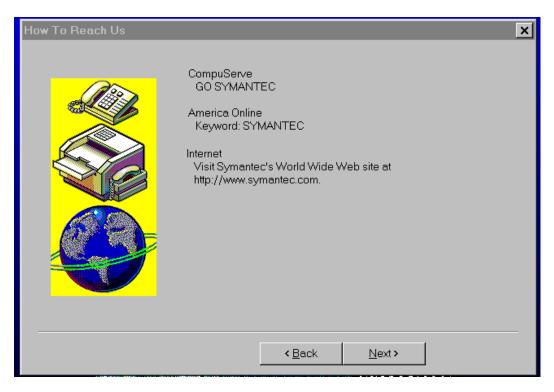
10. At the Symatec Support Solutions dialog box select **Next**.



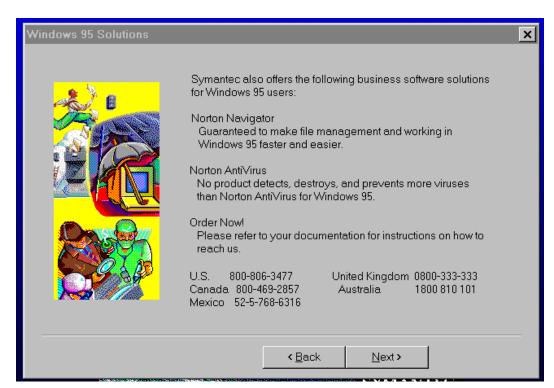
TOC

LOT

11. At the How to Reach Us dialog box select **Next**.



12. At the Windows 95 Solutions dialog box select **Next**.



TOC

LOT

13. At the Registration Wizard dialog box select SKIP.

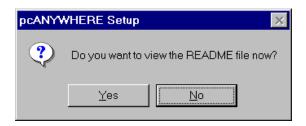


LOT

TOC

LOF

14. At the pcanywhere setup dialog box select **No**.



15. At the Setup Complete dialog box, verify Yes, I want to restart my computer now is selected, then select **Finish**.



TOC

LOT

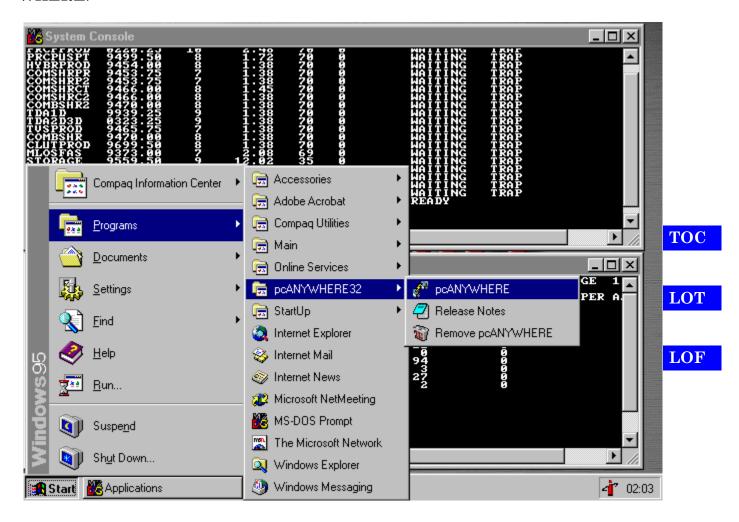
LOF

16. Remove the CD-ROM.

## 3-10.3 Configuring pcANYWHERE on Another PC or Laptop PC

1. Ensure that all software is closed on the other PC or Laptop PC except for Windows 95.

2. At the Windows 95 Tool Bar, select **Start**, **Programs**, **pcANYWHERE32**, **pcANY-WHERE**.



3. At the Smart Setup Wizard dialog box, VERIFY THE CORRECT MODEM IS DISPLAYED FOR YOUR PC or Laptop PC and select  $\bf Next$ .



TOC

LOT

LOF

4. At the Smart Setup Wizard dialog box, verify TCP/IP is selected and then select **Next**.



5. At the Smart Setup Wizard dialog box, verify LPT1 is the correct COMM device and select  $\mathbf{Finish}$ .



TOC

LOT

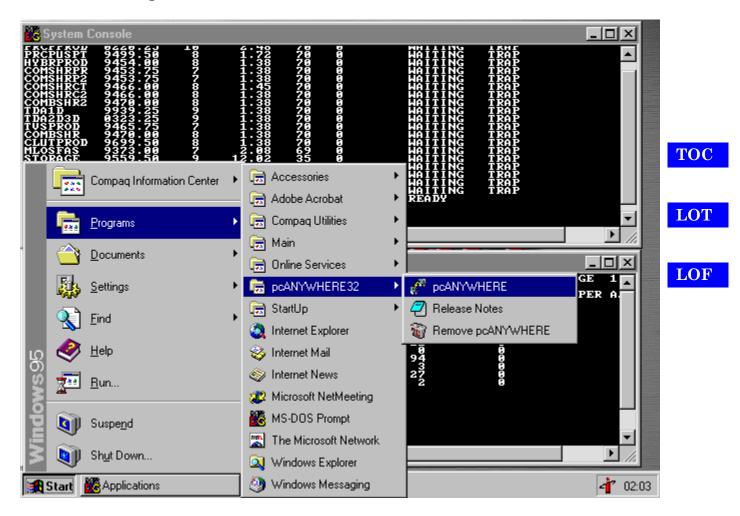
LOF

6. At the pcanywhere32 main menu select **Exit**.

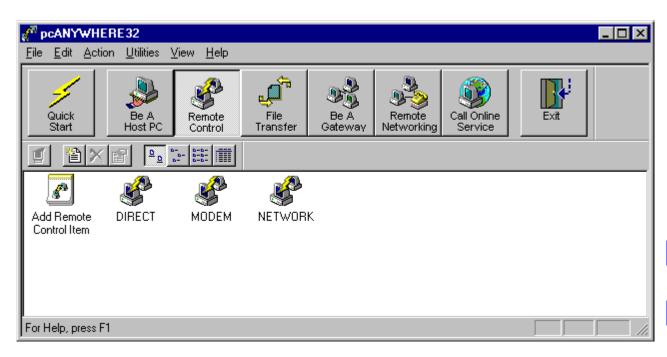
# 3-10.4 Use Another PC or Laptop PC to Access a Host Machine (either the RDA MMI or the UCP terminal).

To call into a RDA MMI or UCP Host terminal from a remote location, pcANYWHERE Software must be installed on the machine used to dial in.

1. At the Windows 95 Tool Bar, Select **Start**, **Programs**, **pcANYWHERE32**, and **pcANYWHERE**.



2. At the pcanywhere32 main menu, select Remote Control.

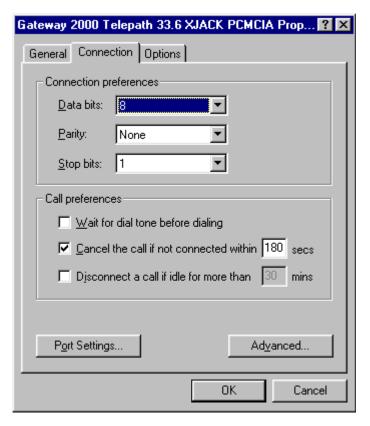


- 3. Right click on the **Modem** icon and select **properties**.
- 4. Select **Details**.
- 5. Select Connections.

TOC

LOT

6. Change Cancel the call if not connected within 60 seconds to  $180\ seconds$ , and then select OK.



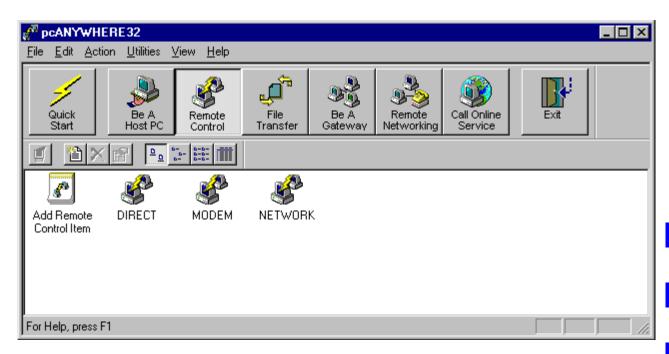
TOC

LOT

LOF

7. Select **OK** again.

8. Using the mouse, double click on the **Modem** icon.

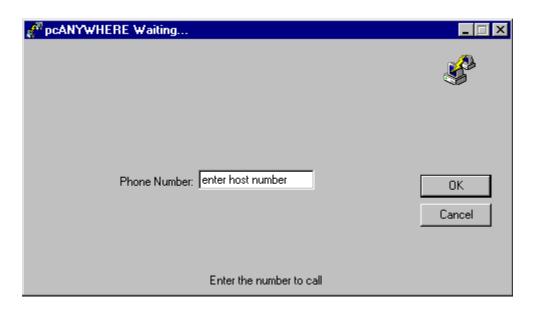


#### Note

TOC

LOT

9. At the pcanywhere waiting dialog box, enter the *phone number* of the host terminal.



TOC

LOT

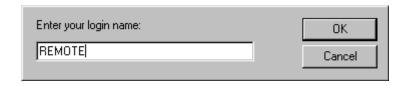
10. Select OK.

Note

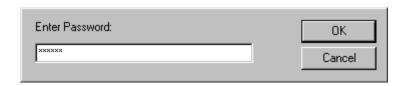
LOF

You were directed to change the DEFAULT Login Name and Password after initial setup, and periodically thereafter. Keep the same Login Name and Password at the UCP, the RDA MMI, and the other PC or Laptop to minimize the risk of forgetting your password.

11. Enter your  $Login\ Name\$ and select  $\mathbf{OK}$ 



12. Enter your Password and select OK



# 3-10.5 To Disconnect Remote Access using Another PC or Laptop PC.

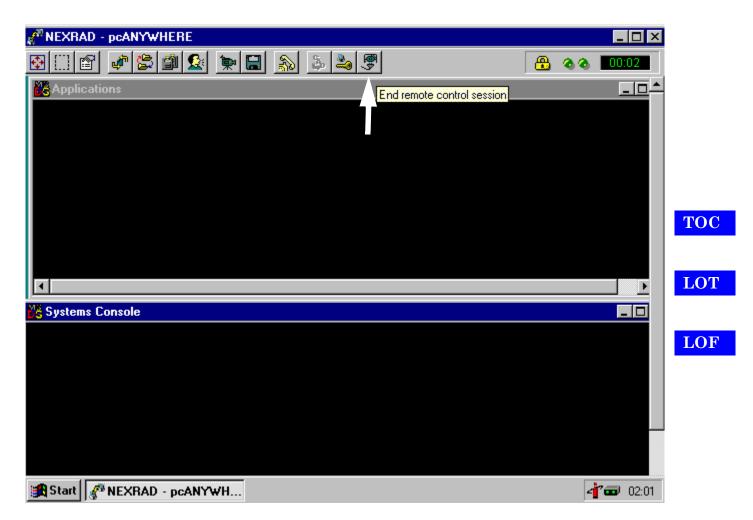
# **CAUTION**

Either the host or the remote user can end a remote control session and the remote caller can change the mode to which the host returns although this should be carefully avoided. Ensure prior to disconnecting remote access that no changes have been made to the Host machine's configuration.

TOC

LOT

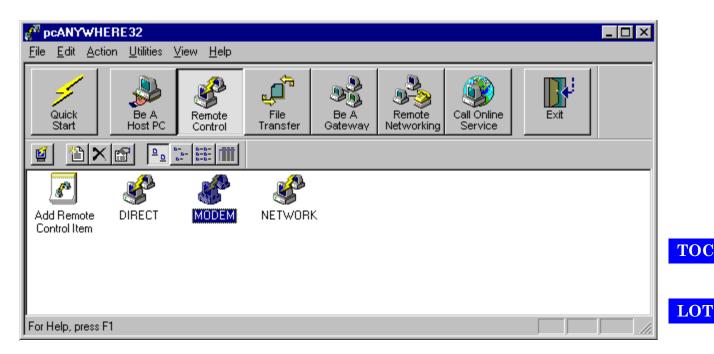
1. Select **End Remote Control Session** by pressing the End Remote Control Session icon.



2. Select **Yes**.



3. At the pcanywhere32 main menu select **Exit**.



3-10.6 Using a Host Machine to Access Another Host Machine (i.e. using either the RDA MMI to access the UCP or vice versa)

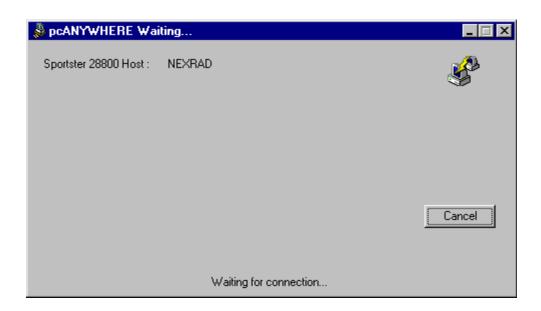
LOF

#### Note

This step assumes that pcANYWHERE is currently active and in Waiting mode.

1. At the Windows 95 Tool Bar, select **pcANYWHERE Waiting**.

2. Using the mouse, cancel the pcanywhere32 Waiting dialog box, by clicking on the **Cancel** button.



TOC

LOT

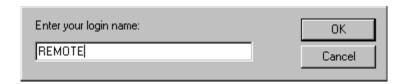
- 3. At the Windows 95 Tool Bar, select **Start**, **Programs**, **pcANYWHERE32**, and **pcANYWHERE**.
- LOF

- 4. Select **Remote Control**.
- 5. At the pcanywhere32 dialog box with the Remote Control button highlighted, double click on the **Modem** icon.
- 6. Enter the *phone number* of the host terminal, and then select **OK**.

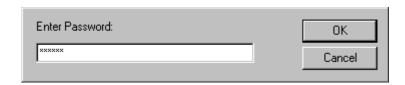
#### Note

You were directed to change the DEFAULT Login Name and Password after initial setup, and periodically thereafter. Keep the same Login Name and Password at the UCP, the RDA MMI, and the other PC or Laptop to minimize the risk of forgetting your password.

7. Enter the  $Login\ Name$  and then select OK.



8. Enter the Password and then select OK.



### Note

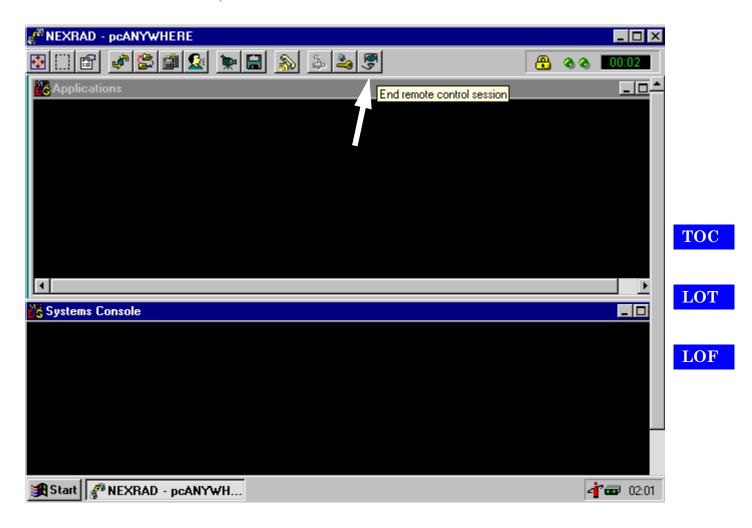
The host machine must be setup with pcANYWHERE Waiting for a connection. The host terminals are delivered with pcANYWHERE configured to wait for the connection from a remote PC. If the Host software becomes reconfigured, restore pcANYWHERE Software Setup, or restore pcANYWHERE Software as necessary.

TOC

**3-10.7 To Disconnect Remote Access using a Host Machine Operating as a Remote**The host being operated as a remote caller can change the configuration mode of the distant host being called. Always return the distant host to the original configuration mode prior to disconnect.

LOT

1. Select End Remote Control Session by pressing the End Remote Control Session icon, and then select Yes.





- 2. To return the machine that has been operating as a remote caller to host mode and to wait for a call, select **Be a Host PC**.
- 3. Double click on the **Modem** icon, and verify pcanywhere waiting is located on the Windows 95 task bar.

### 3-10.8 Changing your Login Name/Password

The pcANYWHERE Software allows you to assign a password to your equipment to protect against unauthorized use. You can use the same password for the UCP host and for the RDA MMI host. You can use the same password also for another PC or Laptop PC used to call the UCP host or the RDA MMI host. Using the same password makes it easier to remember.

The same default login name and password have been provided to all sites for all RDA/RPG Remote Access Terminals. The default password provided to you is REMOTE. You will need to know this to change the default password to a new password. A new login name/password should be selected during initial setup. A new login name/password should also be selected periodically and always after personnel changes. (See Chapter IV. SECURITY POLICY, paragraph 13, for specific recommendations for password selections.)

#### Note

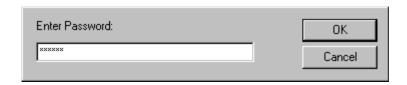
The following procedure assumes pcANYWHERE is not running, and you will have to start the program.

1. From the Windows 95 tool bar, select **Start**, **Programs**, **pcANYWHERE32**, **pcANYWHERE**.

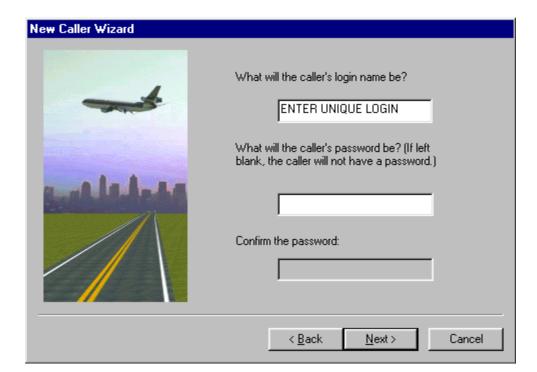
TOC

LOT

- 2. Select the **Be a Host PC** icon.
- 3. Right click on the **Modem** Icon using the mouse and then select **Properties**.
- 4. Enter the *default password* and select **OK**.



- 5. At the Modem Properties dialog box select **Callers**.
- 6. Right click on the Remote Icon and select **Properties**.
- 7. Type in your *new login name*, *new password*, and re-enter your *new password* again to confirm it.



- 8. Select  $\mathbf{OK}$ .
- 9. Select **OK**.

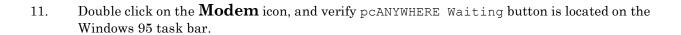
#### Note

Once you have made changes to your password on one of your host RDA/RPG Remote Access Terminals, you should make the same changes to the other host terminals. One password will be easier to remember than multiple passwords.

10. Select **Be a Host PC**.

TOC

LOT



TOC

LOT

# 3-11 TROUBLESHOOTING A REMOTE SESSION

Common errors occurring during remote control sessions and solutions to those errors are shown in the following table.

Symptom	Solution
Lost connection	Wait a few minutes and attempt to reconnect.
No connection	Check hardware and software setup. If the modem dials the host but can't make a connection, check the hardware configuration. Verify the line is connected to the TELCO port.
No carrier	Check software setup.
Login name unsuccessful	Verify login and password setup of Host and Remote.
No response from the modem	Check modem port designation. Check modem installation.
Other side canceled	An escape key sequence was used at the Host.
Out of memory	Close other applications that are open on the remote PC.
Connects but connection ends quickly and plus (+++) signs appear on screen	Check hardware and software settings and configura- tion. This indicates communication or interrupt con- flict.
Menu bar garbled	Check file applications option screen scaling and local full screen display are not selected.
Modem isn't on pcANYWHERE's list and won't initialize	If Hayes compatible, use the Hayes modem setting that matches the data rate of the remote modem. Check the remote modem's technical manual.
Operator abort	When the escape key is pressed, file transfer is aborted. (File transfer is prohibited)
Display screen okay but keyboard doesn't respond	Check files, application option DOS Session and select Level 1 from the Special Keyboard Handler drop-down list box.
The requested communications device is already in use	This indicates that another communications program is using the COMM port already. Check the hardware setup of the remote PC.  NOTE: If you have opened Applications Software or Systems Console twice, the second time you have opened that object you will be assigned to an inoperable COMM port.
Connects but terminal updates and response to terminal input is extremely slow.	Check data rate of modem, properties, and settings.
Display of Applications Software or Systems Console garbled.	Press < Ctrl > < Break > .
Several rings and no pickup.	Check line connection of Host and Software Setup.
Busy signal on line.	The last call may not have properly disconnected. Check Software Setup of host.

TOC

LOT

#### 3-12 SYSTEM PROBLEMS

### 3-12.1 The Need to Restore and Reconfigure.

If necessary, the terminal can be restored with baseline software components to resolve software problems. The following list identifies some of the problems that may make it necessary to reload and/or configure the software.

- Difficulty starting Windows
- Repeated abnormal shutdowns or power outages
- Difficulty operating any other than baseline software components
- Loss of communications with Applications or System Console
- Trouble using the modem
- Accidental software reconfiguration or software removal
- Use of unauthorized software or hardware

Baseline software components include Windows 95 and appropriate drivers, PC Passport software, and pcANYWHERE32 software.

# TOC

#### NOTE

Sometimes it can be difficult to determine whether a software problem or a hardware failure has occurred. Follow the system troubleshooting tips below prior to restoring any software. Use the following checklist along with software setup instructions to determine if simple changes to the setup is appropriate:

# LOT

LOF

### 3-12.2 Software Setup Checklist

- Windows 95 Setup.
  - A. Check Screen Saver setup.
  - B. Check control panel COMMs port properties.
  - C. Check for normal display with all other software closed.
- 2. PC-Passport Setup.
  - A. Check System Console properties.
  - B. Check Applications Software properties.
  - C. Check configuration file write protection (PASSPORT.CM3 and PASSPORT.CM4).
- 3. Check pcANYWHERE setup.
  - A. Check Applications Software setup
  - B. Check Modem properties

#### 3-12.3 System Troubleshooting Tips

- 1. If Windows and pcANYWHERE appear to be working correctly but there is no communications with Applications and System Console proceed to PC Passport restoral instructions and verify the configuration of the ports.
- 2. If Windows and pcANYWHERE appear to be working correctly and System Console is available but there is no communication with the Applications Software, verify that the RDA or the RPG is up. Until the RDA or RPG is booted, no Applications Software Main Menu will be present.
- 3. If Windows and pcANYWHERE appear to be working correctly and the Applications Software is available but there is no communication with System Console, verify a proper cable connection to COMM3 for the UCP. This is the 9 dB port for the UCP. Verify a proper cable connection to

COMM4 for the RDA MMI. This is the 25 pin port for the RDA MMI.

- 4. Swap the EIA with the AUX cable. A gender changer may be required to perform this step. Be sure to move the null modem adapter with the cable swap. If after swapping the cables there is communication to the System Console but the Applications Software is no longer available, return the CPU to NRC for repair. Otherwise, check the terminal configuration for System Console and Applications Software and correct the settings.
- 5. If operations appear normal but pcANYWHERE is not in call waiting mode check pcANYWHERE Be a Host modem properties setting to verify the host startup is configured to Launch with Windows.
- 6. If the modem will not dial out and cannot be called in to, check the connection to the surge suppressor and to the TELCO jack. Check the line to ensure a dial tone is available. If the line is working and the connections are good, return the CPU to the NRC for repair.
- 7. If unauthorized software or hardware component(s) have been installed, remove them.
- 8. If there is difficulty starting Windows proceed with Windows 95 and driver restoral.

#### 3-13 RESTORAL OF SOFTWARE

The CPU can be restored with the CD-ROM and diskettes provided when the CPUs were initially issued. One CD-ROM is for Windows 95 and driver restoral. One diskette is provided for Pc-Passport software restoral. One CD-ROM is provided for pcANYWHERE software restoral.

# **CAUTION**

To avoid unnecessary downtime and the possibility of installation errors, the software should not be restored or reconfigured as part of any preventive or routine maintenance effort.

#### 3-13.1 Windows 95 and Driver Restoral

- Close all programs except for Windows 95. Apply power to the computer and monitor. The computer may reflect COMM Port 2 Address Assignment Conflict until further software setup work has been performed and as well, if any other error occurs during the powering up process, press <\mathbf{F1}> to BOOT.
- 2. Insert the RDA/RPG Remote Access Restoral Software CD-ROM.
- 3. Select Add/Remove Software
- 4. Select Install/Uninstall.
- 5. Select **Install**
- 6. Select Next
- 7. When the command line for installation appears as E:\setup.exe press **Finish**.
- 8. Press Continue
- 9. Select **Yes** to Accept the License Agreement.

TOC

LOT

- 10. Select **OK**.
- 11. Select Next to 1) collecting information about your computer.
- 12. Select **c:\windows** and **Next**.
- 13. Select **Compact**.
- 14. Select **Next**.
- 15. At the Windows 95 setup using the Certificate of Authenticity number provided, enter the number **12697-0022377-10578**.

#### NOTE

This number is provided on your CD ROM.

TOC

LOT

LOF

- 16. Press Next
- 17. Using the mouse check the CD ROM Drive Box.
- 18. Press **Next**.
- 19. Select the Install the most common components (recommended).
- 20. Select Next.
- 21. Select No, I do not want a startup disk, and then select Next.
- 22. Select 2) Copying Windows 95 files to your computer.
- 23. Select Next.

#### NOTE

Do not turn off the computer during this process.

- 24. If a version conflict dialog box appears select Yes to keep the newer file(s).
- 25. Select 3) Restarting your computer and finishing setup.
- 26. Press **Finish** to complete the setup.
- 27. Close Date/Time Properties.
- 28. Click **OK** to restart your computer.
- 29. Select **Close** to Welcome to Windows 95.
- 30. Remove the CD-ROM from the CD-ROM drive.

3-88

- 31. Applications Software and System Console should now be available unless PC Passport software has been accidentally reconfigured or deleted.
- 32. Close Applications by entering **Alt>X** twice.
- 33. Close Systems Console by entering **<Alt>X** twice.
- 34. Right click on the **Setup the Microsoft Network** icon.
- 35. At the Confirm File Delete dialog box select Yes.
- 36. Select **Delete**.
- 37. Right click on the Online Services icon.
- 38. At the Confirm File Delete dialog box select Yes.

TOC

- 39. Select **Delete**.
- 40. Right click on the **Internet** icon.

LOT

41. At the Confirm File Delete dialog box select Yes.

- 42. Select **Delete**.
- 43. Right click on the **My Briefcase** icon.
- 44. At the Confirm File Delete dialog box select Yes.
- 45. Select **Delete**.

3-13.2 Establish screen saver to prevent screen display "etching".

- 1. Select My Computer.
- 2. Select the **Control Panel**.



TOC

LOT

3. At the Control Panel dialog box, select  $\bf Display.$ 

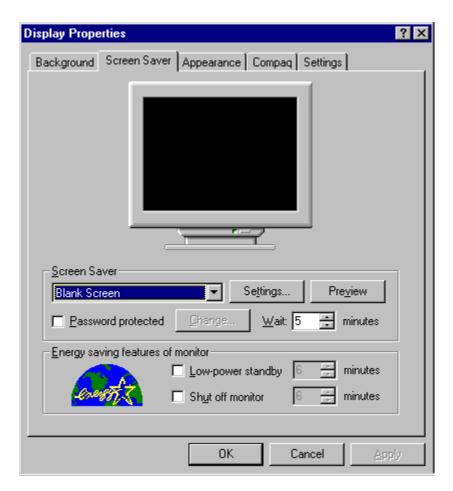


4. Select Screen Saver

TOC

LOT

5. Click on the **Screen Saver** highlighted bar and verify **Blank Screen** is displayed.



- TOC
- LOT
- LOF

- 6. Select 20 minute Wait.
- 7. Press OK.
- 8. Close the Control Panel.
- 9. Close My computer.

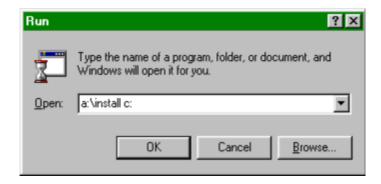
### 3-14 PC-PASSPORT INSTALLATION AND SETUP PROCEDURES

If PC Passport is already installed, skip to pcANYWHERE Software Installation. Otherwise proceed.

- A. Insert PC-Passport Disk Version: R04-01 into A: drive.
- B. From the Windows 95 Start menu select  $\mathbf{Run}$ .



C. Enter *a:\install c:* as shown below:

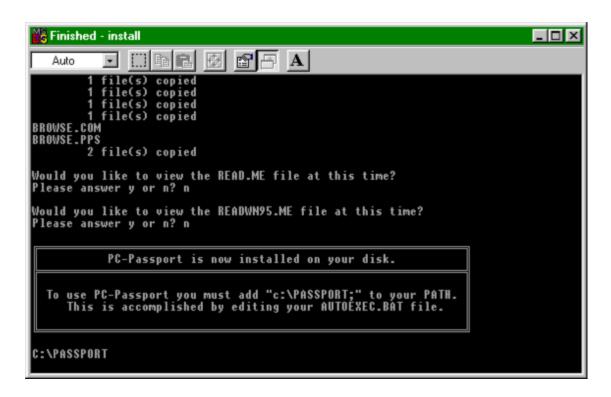


- D. Press **OK**
- E. Press the **space bar** to continue.

#### Note

It may be necessary to maximize the Finish Install window for easier reading.

F. Answer **n** for no to the questions shown below. Do not view the READ.ME and files at this time. Your PC-Passport installation is complete.



G. Close the Finished Install window by pressing **X** at the upper right hand corner.

### 3-14.1 Restoring shortcut ICONs for Applications and Systems Console

In the event that ICONs for Applications and Systems Console are accidentally deleted from the Windows95 Main Menu perform the following steps to recreate this shortcut method:

# **CAUTION**

DO NOT create duplicate System Console and Application Software shortcuts. Launching the System Console or Application Software twice can cause file corruptions and damage to the software.

- 1. Right click once on **Start**.
- 2. Select **Open**.

TOC

LOI

- 3. Double click on **Programs**.
- 4. Double click on **Startup**.
- 5. Right click once on Applications.
- 6. Select Create Shortcut.
- 7. Drag the Application (2) icon to the Windows 95 Main Menu.
- 8. Right click once on **Systems Console**.
- 9. Select Create Shortcut.
- 10. Drag Systems Console (2) icon to the Windows95 Main Menu.
- 11. Close Startup by click on **X** in the upper right corner.
- 12. Close Program
- 13. Close Start.
- 14. Right click once on Applications(2) icon.
- 15. Select **Rename**
- 16. Type in Applications **Enter>**.
- 17. Right click once on **Systems console(2)** icon.
- 18. Select **Rename**.
- 19. Type in Systems Console and press **Enter**.

### 3-14.2 Insert Icons for System Console and Application Software.

The software setup for the UCP is as follows. However, the software setup for the RDA MMI differs. Follow the field installation procedures in Modification Note 43/TCTO 31P1-4-108-559 for the RDA MMI software setup.

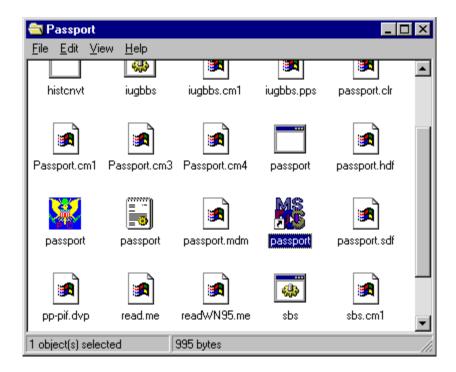
TOC

LOT

A. Select My Computer, C: drive, Passport folder.



B. Highlight the MS DOS Passport icon.



C. Select **Edit**.

TOC

LOT

D. Select **Copy**.



- E. Close the Passport folder by pressing the **x** in the upper right and corner twice.
- F. Close C: by pressing **x** in the upper right hand corner.
- G. Close My Computer by pressing **x** in the upper right and corner.

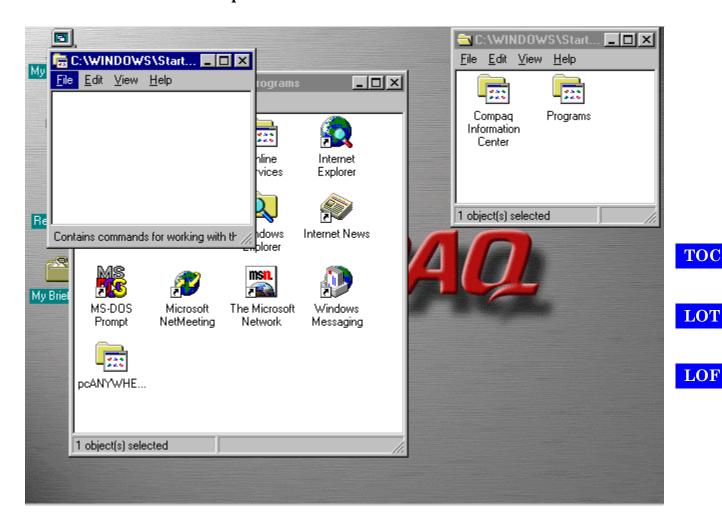
H. At the Windows 95 task bar, right click on **Start**, and select **Open**.



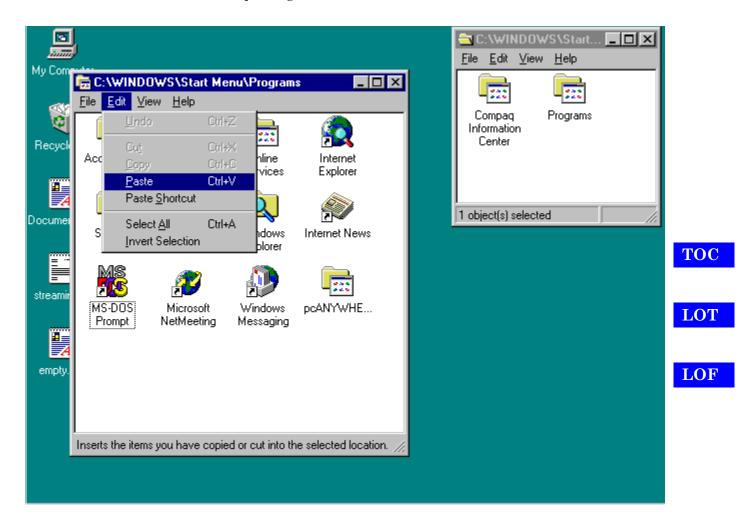
I. Select **Programs**.



# J. Select Start Up.



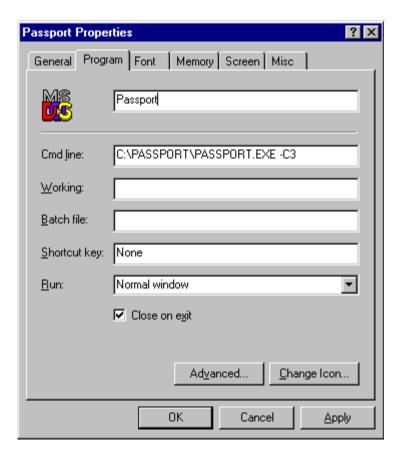
K. From the Start Up dialog box select **Edit**.



# L. Select **Paste**.



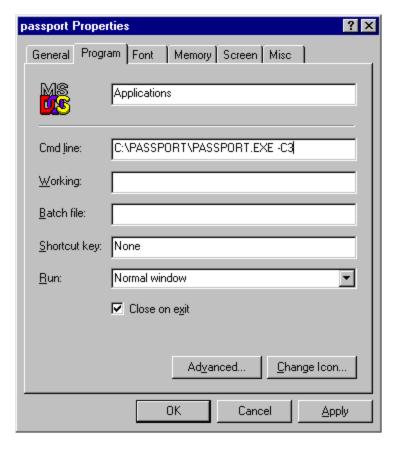
M. With passport highlighted select File, Properties, Program.



TOC

LOT

N. Change the word passport to **Applications** on the MS DOS line.

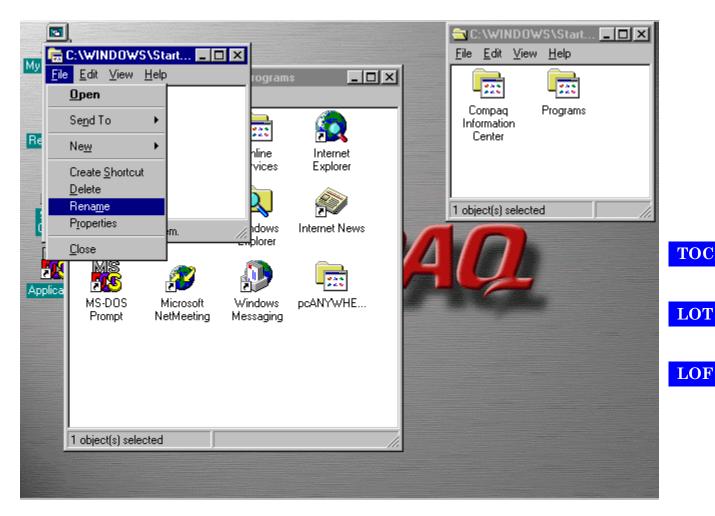


- TOC
- LOT
- LOF

- O. For the UCP computer setup, change the command line to C:\PASSPORT\PASSPORT.EXE -C3
- P. Press **OK**.
- Q. Highlight the MS DOS Passport icon titled Passport.



R. Select **File**, **Rename**.



S. Type in **Applications**.



- T. Press the **Enter** key.
- U. With Applications highlighted, select **Edit**.

- V. Select Copy.
- Select Edit. W.
- Select Paste. X.
- Y. With a copy of Applications highlighted select **File**, **Rename**.

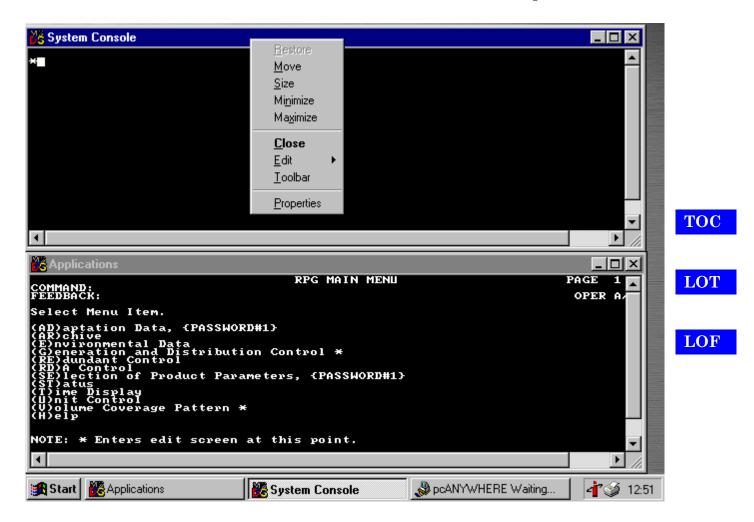


- TOC
- LOT

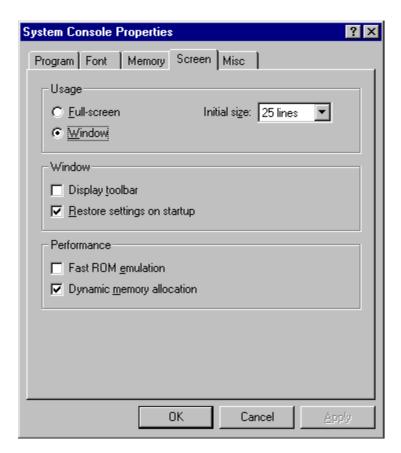
- Z. Type in **System Console**.
- AA. Press **OK**.
- With System Console highlighted select File, Properties. AB.
- AC. Change the word Applications to System Console on the MS DOS line.
- AD. For the UCP computer setup, change the command line to C:\PASSPORT\PASSPORT.EXE -C4. For the RDA computer setup reference the field installation procedures.
- Press **OK**. AE.
- AF. Close the Windows/Start box by pressing the **X** in the upper right hand corner.
- AG. Close the Windows Program box by pressing the **x** in the upper right hand corner.
- AH. Close the Start box by pressing the  $\mathbf{x}$  in the upper right hand corner.
- Press the **Enter**> key. AI.

# 3-14.3 To Set Up the Applications Software and System Console Windows Size and Font.

A. Right click on the task bar of the System Console and select **Properties**.



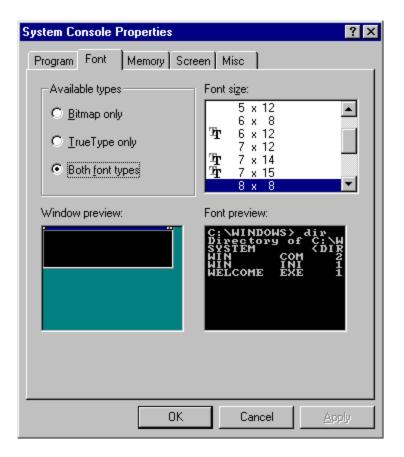
B. Select **Screen**, **Window**, **Initial Size: 25 lines**, and disable the toolbar by toggling the check mark in front of the Display toolbar.



TOC

LOT

C. Select **Font**, **Both Font Types** and **8 x 8** for Font size.

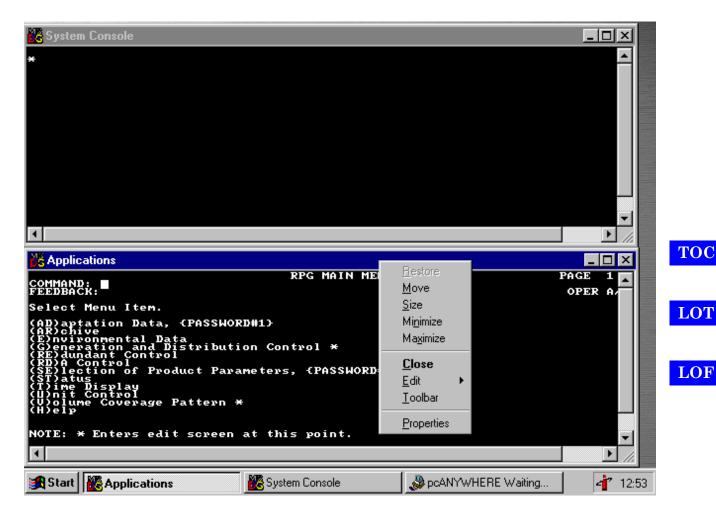


D. Select OK.

TOC

LOT

E. Right click on the Task Bar of the Applications window and select **Properties**.



- F. Select Screen, Window, Initial Size: 25 lines, and disable the toolbar by toggling the check mark.
- G. Select **Font**, **Both Font Types** and **8 x 8** for Font size.
- H. Select  $\mathbf{OK}$ .
- 3-14.4 To Set Color Attributes for Passport Screens.
  - A. Select **Systems Console**.
  - B. Press < Alt > A.

C. Type **SH COL<Enter>**.



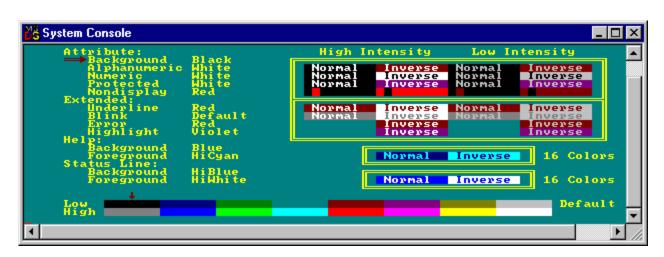
D. Using cursor keys change colors as follows: Cursor ↑ ♦ keys move the cursor between color attributes. Cursor ← ▶ keys toggle from color selection.

Color Attributes:

Background black Alphanumeric white Numeric white Protected white Nondisplay redExtended: Underline red Blink default Error redHighlight violet Help: Background blue Foreground HiCyan

Status Line:

Background Hi Blue Foreground Hi White



TOC

LOT

- A. Press **<Alt>W** to save changes.
- B. Press **<Alt>X** three times.
- C. At Application Software, press **<Alt>X** twice.

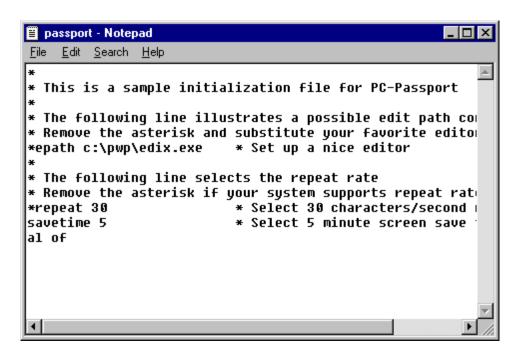
# 3-14.5 To Modify the Passport.ini File so that the ALT Key will not Initiate Help.

A. At the Windows 95 task bar, select **Start** and then select **RUN**.



- B. Type c:\passport\passport.ini
- C. Press **OK**.

D. On the last line type **al of**.



TOC

LOT

- E. Close the Passport Notepad by clicking on the upper right hand  $\mathbf{x}$ .
- F. Save the changes by pressing **Yes**.

#### 3-14.6 Protecting the Configuration.

Applications Software and System Console screen setups can be write protected to prevent configuration changes to the Setup Main Menu. To do this:

A. At the Windows Main Menu select **My Computer**.



- B. Select C:
- C. Double click on the **Passport** folder.

3-111

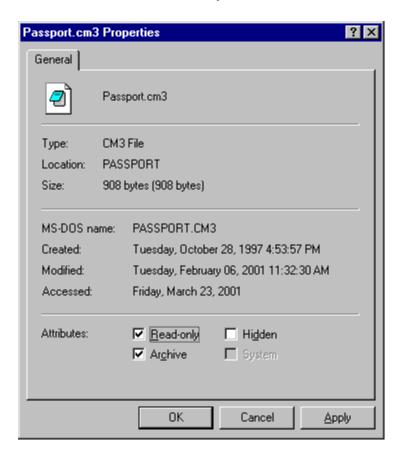
# D. Highlight **PASSPORT.CM3**.



TOC

LOT

- E. Select **File**, **Properties**.
- F. Check the box in front of Read-only and press OK.



G. Highlight PASSPORT.CM4

TOC

LOT

- H. Select File, Properties.
- I. Check the box in front of **Read-only** and press **OK**.



## 3-14.7 pcANYWHERE Software Restoral for the Host Terminal.

## NOTE ON LICENSING

You are entitled to use pcANYWHERE32 on four computers including the equipment installed in the UCP position, the equipment installed in the RDA MMI position, and if necessary, two other computers used for remote access.

- 1. Make sure that Windows 95 is running on your computer and all other software is closed.
- 2. Insert the pcANYWHERE32 CD-ROM into your computer's CD-ROM drive.

3-114

TOC

LOT

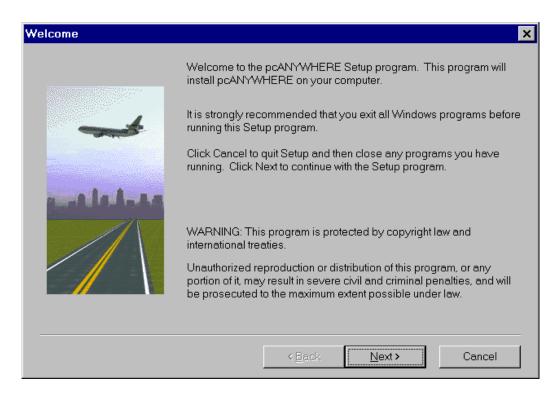
- 3. For the terminals provided for remote access (UCP Position and the RDA MMI Position), Windows Autoplay is enabled; therefore, the pcanywhere32 installation screen will come up automatically.
- 4. Select **Install Software**.



TOC

LOT

5. At the Welcome dialog box select **Next**.

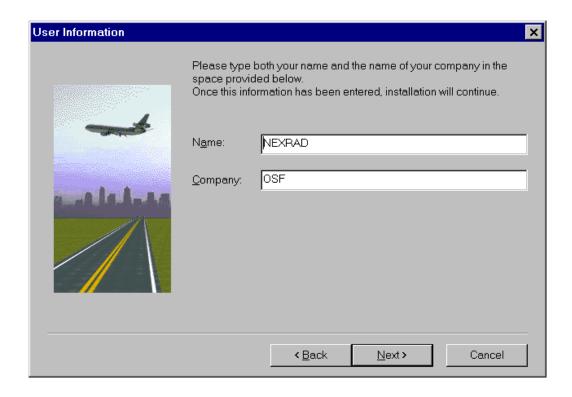


TOC

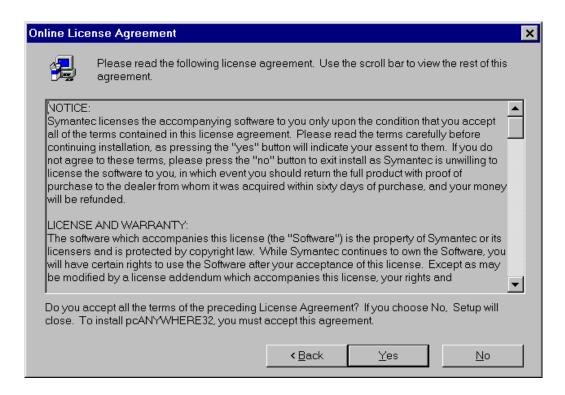
LOT

LOF

6. At the User Information text box type **NEXRAD** for Name and **OSF** for Company and then select **Next**.



7. At the Online License Agreement dialog box select Yes.



8. Verify the destination directory is c:\Program Files\pcANYWHERE and select **Next**.



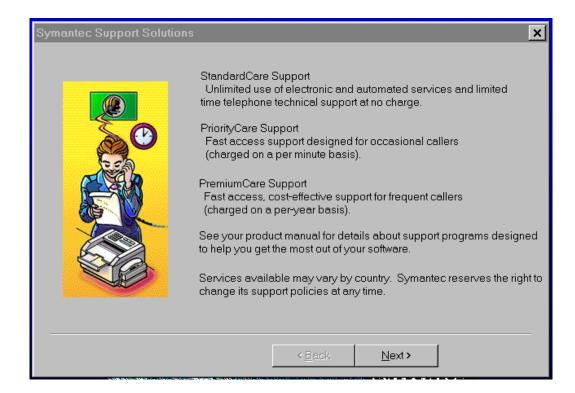
TOO

LOT

9. At the Setup Review dialog box select **Next**.



10. At the Symatec Support Solutions dialog box select **Next**.



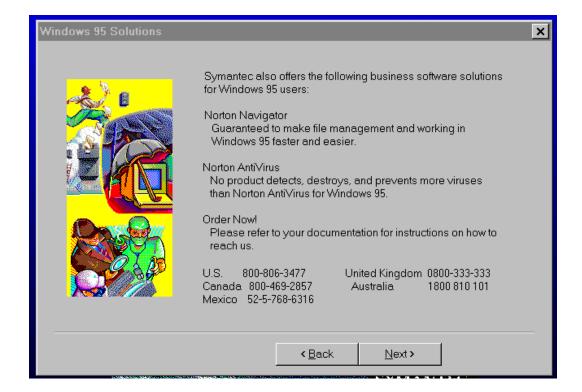
TOC

LOT

11. At the How to Reach Us dialog box select **Next**.



12. At the Windows 95 Solutions dialog box select **Next**.



TOC

LOT

13. At the Registration Wizard dialog box select **SKIP**.

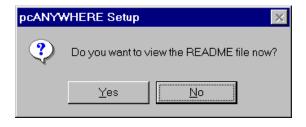


TOC

LOT

LOF

14. At the pcanywhere setup dialog box select  $\mathbf{No}$ .



15. At the Setup Complete dialog box, verify Yes, I want to restart my computer now is selected, then select **Finish**.



TOC

LOT

LOF

16. Remove the CD-ROM.

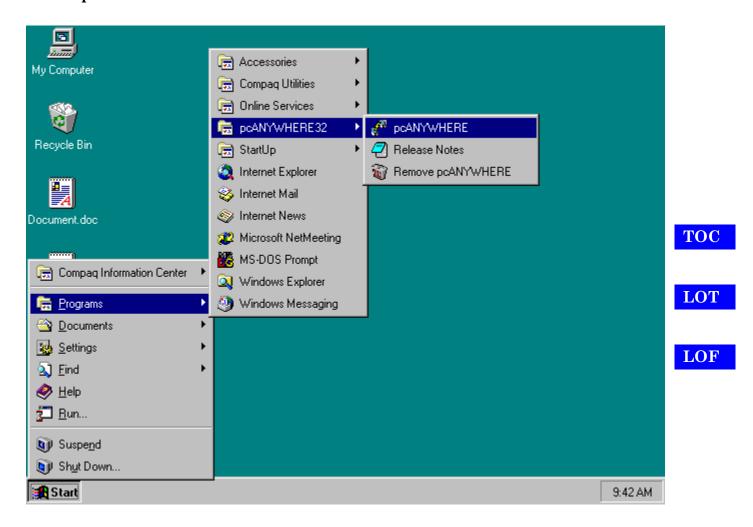
## 3-14.8 pcANYWHERE32 Software Setup Necessary after Restoral for the Host Terminals

#### Note

In the procedures that follow, several steps will instruct you to make specific changes to the setup of pcANYWHERE32 Software. Do not make any changes to any default settings other than those directed to in these procedures.

An unexpected error may occur during or immediately after pcANYWHERE software restoral. This will present itself as a WINAW32.EXE and has to do with the video graphics capability of the machine. Close pcANYWHERE software and restart the program if this occurs.

1. At the Windows 95 Tool Bar, select **Start**, **Programs**, **pcANYWHERE32**, **pcANYWHERE**.



2. At the Smart Setup Wizard dialog box, verify modem is Sportster 28800 Internal, and then select **Next**.



TOC

LOT

LOF

3. At the Smart Setup Wizard dialog box, verify TCP/IP is the default, and then select **Next**.



4. At the Smart Setup Wizard dialog box, verify LPT1 is the COMM device and then select **Finish**.



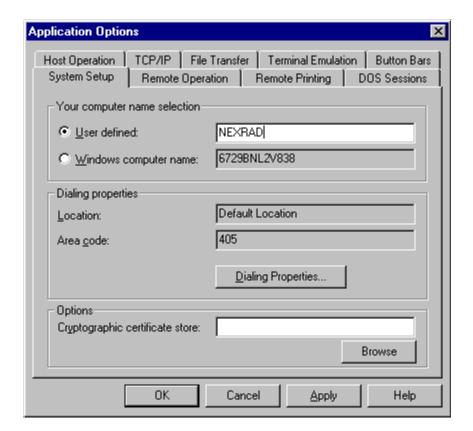
TOC

LOT

LOF

5. Select File, Applications Options, System Setup.

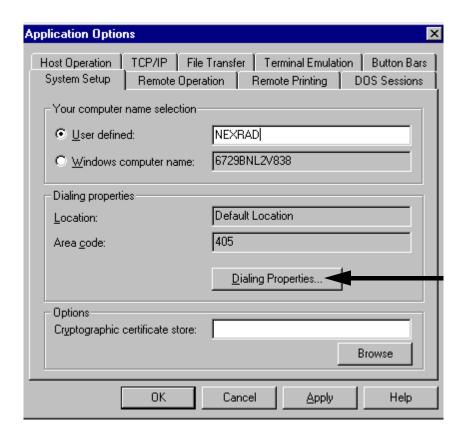
6. At Your Computer Name Selection, select **User Defined** and enter **NEXRAD**.



TOC

LOT

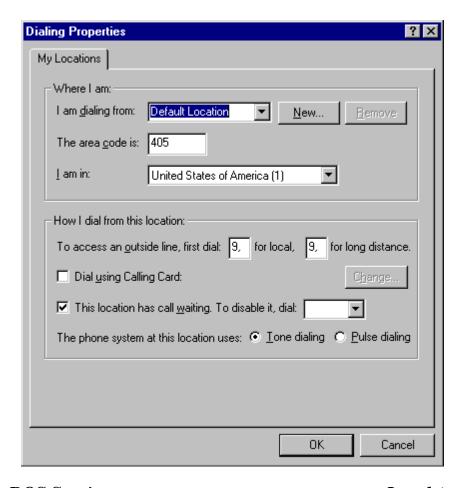
7. At the System Setup dialog box, select **Dialing Properties**.



TOC

LOT

8. Enter your area code and verify your access to an outside line is 9, for local, and 9, for long distance. The comma represents a pause. Remove the check on This location has call waiting, and then select  $\mathbf{OK}$  after any necessary changes are made.



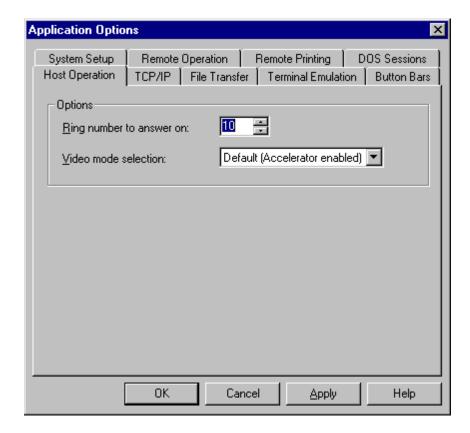
TOC

LOT

LOF

9. Select **DOS Session**. Change Special Keyboard Handler to **Level 1** from the Special Keyboard Handler drop-down list box.

10. Select **Host Operations**. Change Ring number to answer on: to **10**.



# TOC

# LOT

# LOF

# WARNING

The above ring setting is made to increase personnel safety and site security. It provides for the phone to ring 10 times before the modem picks up. 10 rings discourages hackers and provides a reasonable time for personnel to pick up the phone and prevent remote access if necessary.

11. Select Button Bars, and disable Quick Start, File Transfer, Be a Gateway, Remote Networking, and Call Online Service.

Application Optio	ns			X
System Setup Host Operation	Remote Opera	ation Remo Transfer Ter	te Printing   minal Emulatio	DOS Sessions   n Button Bars
Action Bar	e Action Buttons			
☐ Quick start  ☑ Be a host PC		☐ Be a gateway ☐ Remote <u>n</u> etworking		
✓ <u>Remote control</u> ☐ File transfer		☐ Call online service ☐ Exit		
Make the Action Buttons this size  C Icon only				
● Icon an	-			
Toolbar Allow folds	er <u>b</u> rowse			
Show folder history				
	OK	Cancel	Apply	Help

TOC

LOT

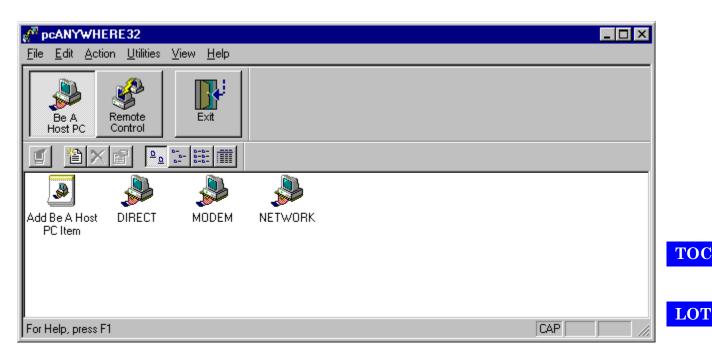
LOF

12. Select **OK**.

# Note

An unexpected error may occur during or immediately after pcANYWHERE software restoral. This will present itself as a WINAW32.EXE and has to do with the video graphics capability of the machine. Close pcANYWHERE software and restart the program if this occurs.

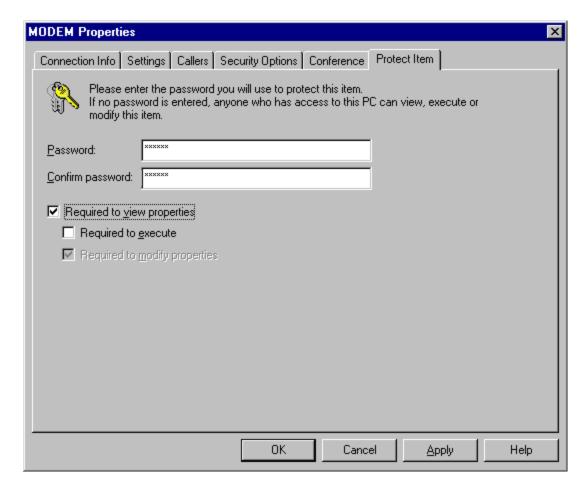
13. At the pcanywhere32 Main menu, select **Be a Host PC**.



- 14. At the pcanywhere32 Main menu, select the **Direct** icon.
- 15. Using the mouse, right click on the **Direct** icon and select **Delete**, then select **Yes** to delete the selected item.
- 16. At the pcanywhere32 Main menu, select the **Network** icon.
- 17. Using the mouse, right click on the **Network** icon and select **Delete**, then select **Yes** to delete the selected item.
- 18. Using the mouse right click on the **Modem** icon, and then select **Properties**.
- 19. Select **Protect Item**.

3-130

20. Enter the default password **REMOTE**, and **confirm password**, then select **Required to View Properties**.



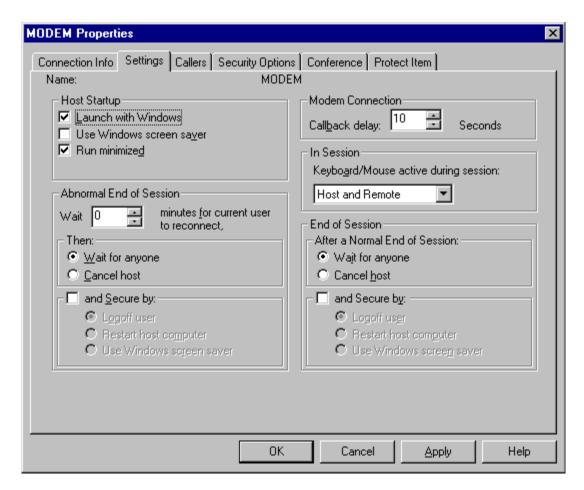
TOC

LOT

LOF

3-131

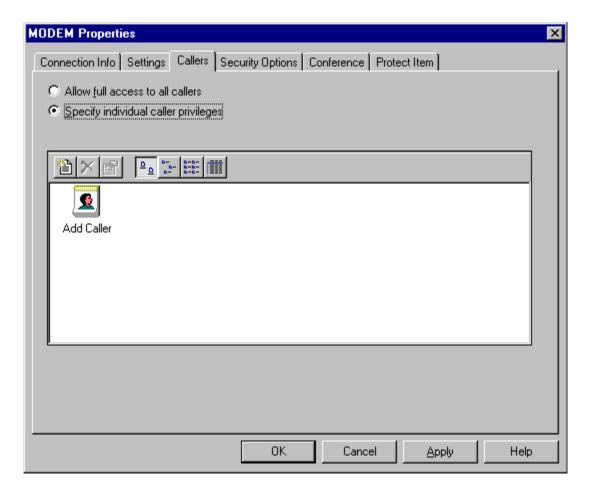
21 At the MODEM Properties dialog box, select **Settings**.



- TOC
- LOT
- LOF

- 22. At the Host Startup, select Launch with Windows.
- 23. At the MODEM Properties dialog box, select Callers.

24. Select Specify individual caller privileges.



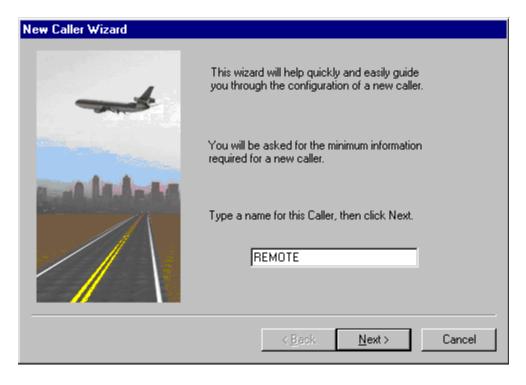
TOC

LOT

LOF

25. Double click on the **Add Caller** icon.

26. Change New Caller to **REMOTE** and select **Next**.

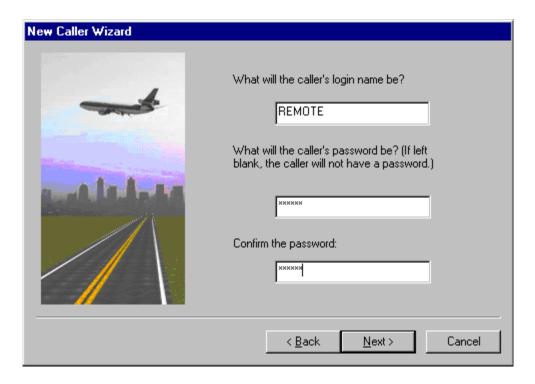


TOC

LOT

LOF

27. Type in the Default Caller Login Name **REMOTE**, and then confirm the password by entering the Default Password **REMOTE**.



28. Select **Next**.

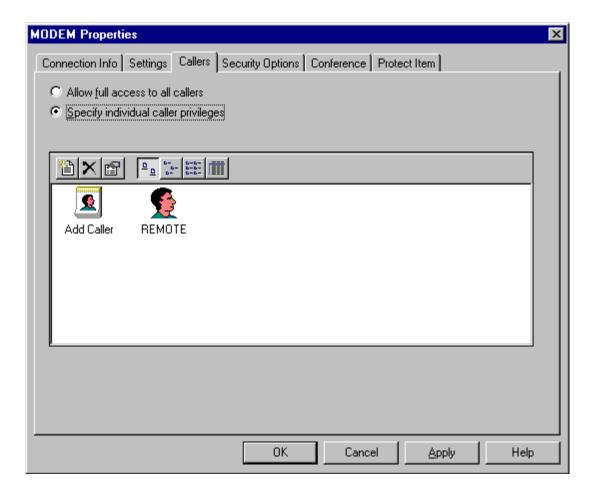
# 29. Select **Finish**.



TOC

LOT

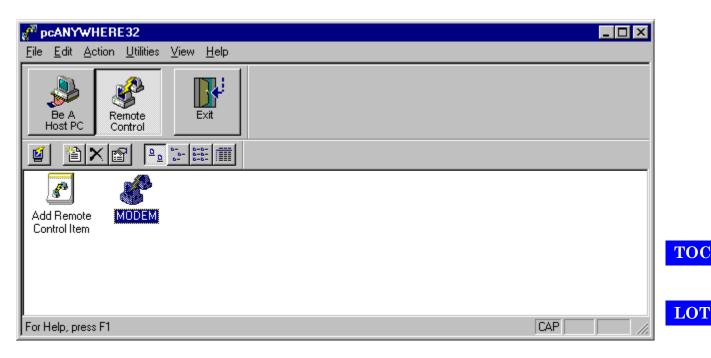
# 30. Select $\mathbf{OK}$ .



TOC

LOT

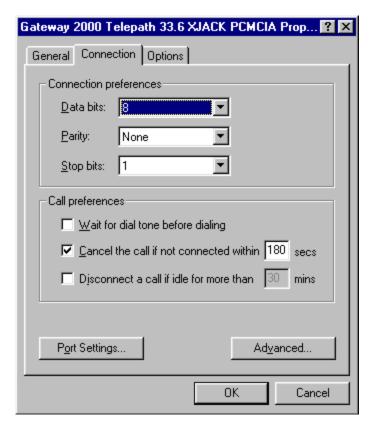
31. Select the **Remote Control** icon.



32. Using the mouse right click on the **Direct** icon and select **Delete**.

- 33. Select **Yes** to delete the selected item.
- 34. Using the mouse right click on the **Network** icon and then select **Delete**.
- 35. Select **Yes** to delete the selected item.
- 36. Right click on the **Modem** icon and select properties.
- 37. At the Modem Properties dialog box select **Details**.
- 38. At the Sports 28800 Internal Properties dialog box select **Connections**.

39. Change Cancel the call if not connected within from 60 seconds to  $180 \ {\rm sec}$  onds, and then select OK.



- TOC
- LOT
- LOF

- 40. Select **OK** again.
- 41. At the pcanywhere32 dialog box, select **Exit**. This complete the restoral and setup of pcanywhere32 on a host terminal.

TOC

LOT

LOF

This page is intentionally left blank.

# IV. SECURITY POLICY

#### 4-1 INTRODUCTION

The purpose of this policy is to define a comprehensive security policy for WSR-88D RDA/RPG Remote Access. This policy addresses the various Automated Data Processing (ADP) security issues that the government faces in implementing remote access capability including the transfer of data between existing NWS and DOD RDAs and RPGs and remote ADP equipment where those connections: a) are needed to support operations and b) can be accomplished in a manner that protects WSR-88D equipment from "denial of service" risk due to intrusion. In addition, this policy defines the responsibilities for the implementation, maintenance and administration of this security policy.

## 4-2 SCOPE

The scope of the policy includes a) all of WSR-88D RDA/RPG Remote Access equipment including hardware and software; and b) all personnel using, operating, or servicing the WSR-88D RDA/RPG Remote Access Terminal hardware and software.

#### 4-3 POLICY OBJECTIVES

RDA/RPG Remote Access Terminal is important to the WSR-88D mission. The objectives of the RDA/RPG Remote Access Terminal Security Policy are to:

- a. Prevent denial of authorized service. Unauthorized access to the RDA and RPG computers may degrade the system's availability or performance. Tampering may result in loss of data integrity, degraded performance due to increased processing or communications load (e.g., caused by a software virus), loss of functionality due to software damage or configuration changes, or potentially, even hardware damage.
- b. Prevent unauthorized actions. Unauthorized actions such as unauthorized dissemination of WSR-88D products or unauthorized changes to system configuration must be prevented to maintain system availability and configuration control.
- c. Protect confidentiality. The WSR-88D contains information which must be protected from unauthorized disclosure. Examples of such information include a) proprietary data; b) proprietary software; c) information to access external computer systems; d) intellectual property such as unpublished research results.

# 4-4 APPLICABLE LEGAL AND POLICY DOCUMENTS

Public Law 100-235 (the Computer Security Act of 1987) and Office of Management and Budget (OMB) Circular A-130 require all federal agencies to plan for the security of all sensitive Information Technology (IT) systems throughout their life cycle. OMB Circular A-130 also establishes a minimum set of controls to be included in federal IT security programs. The program must include the implementation of policies, standards, and procedures which are consistent with government-wide laws and regulations, to assure an adequate level of protection for IT systems whether maintained inhouse or commercially. The "Department of Commerce IT Security Manual" contains the specific policies for accomplishing the Department's IT security program.

#### 4-5 POLICY STATEMENT

The RDA/RPG Remote Access Terminal Security Policy is summarized in the following paragraphs.

#### 4-6 RESPONSIBILITIES

The Operational Support Facility (OSF) is responsible for the overall RDA/RPG Remote Access Terminal IT Security. This responsibility flows down through the management of all departments associated with the WSR-88D program to the individual users. The OSF WSR-88D Security Officer will be responsible for:

- a. Monitoring and evaluating security threats;
- Ensuring and maintaining the security of all interfaces between the RDA and RPG and external systems;
- c. Developing modifications to this security plan as needed;
- d. Developing procedures and guidelines as needed;
- Evaluating and approving new security technologies, mechanisms, devices, and systems if necessary;
- f. Detecting and responding to security incidents;
- g. Issuing security alerts;
- h. Providing assistance to users on security matters;
- i. Advising NWS and DOD Management on RDA/RPG Remote Access Terminal matters.

The security of each WSR-88D site where RDA/RPG Remote Access Terminal is available (e.g., NWS Single Thread and DOD systems) is the responsibility of that site's manager. The implementation of the site's security procedures is the responsibility of that site's System Administrator. At many sites, the role of the System Administrator may be assumed by the site's Electronic System Analyst (ESA) or the WSR-88D Electronic Technician.

The security of each RDA and RPG is the responsibility of that user. Thus, users must protect their equipment used for remote access and should not share the equipment or share operational information on use with any other persons. Users are responsible for ensuring that their actions do not violate this Security Policy regardless of the security mechanisms in place.

#### 4-7 ALLOWED USE OF RDA/RPG REMOTE ACCESS TERMINAL

RDA/RPG Remote Access operations may be allowed by authorized personnel to support the WSR-88D missions, including forecast and warning operations, maintenance, training, and research. Unauthorized access to WSR-88D equipment and data is not permitted. Unauthorized actions which might lead to the disruption or degradation of WSR-88D operations are prohibited. Such actions include, but are not limited to, unauthorized use of a WSR-88D site, and unauthorized changes to system hardware or software configuration.

# 4-8 USE OF NON-RDA/RPG REMOTE ACCESS TERMINAL SOFTWARE ON WSR-88D FACILITIES

Use of software obtained from any sources, (except as instructed via OSF approved Modification Notes and TCTOs) is prohibited on RDA/RPG Remote Access Terminal equipment, due to potential interference with the operational use of the system. In order to reduce the risk of software viruses, "Trojan horses," and similar threats, <u>users shall not download or transfer any software to the RDA/RPG Remote Access Terminal equipment, except as explicitly authorized by the OSF.</u> In this context "software" includes information encoded in Postscript, Java, and other similar languages.

#### 4-9 PRIVACY

Electronic information, including electronic correspondence that is generated, stored, processed, received, or transmitted using WSR-88D RDA/RPG Remote Access Terminal equipment is considered government property. As such, it is subject to management review and any actions deemed appropriate, including copying, forwarding, or transfer to others, erasure, or printing. At the same time, users who are not in the individual's supervisory chain are not allowed to disclose information from that individual's electronic files without that individual's or his/her supervisor's authorization.

#### 4-10 OPERATION

The RDA/RPG Remote Access Terminal system shall use commercial telephone service and <u>shall</u> <u>under no circumstances be connected to the Internet</u>. To do so would compromise the security of the entire WSR-88D system. RDA/RPG Remote Access Terminal will be stringently monitored for compliance.

For security purposes and to minimize the possibility of invasion, RDA/RPG Remote Access Terminal will be password protected via the software and the password implemented by site personnel. No site personnel will give the "enable" passwords to anyone other than site personnel, OSF Hotline personnel given permission while assisting in troubleshooting the WSR-88D system, or the OSF Security Officer.

#### 4-11 INTERFACES WITH OTHER WSR-88D SYSTEMS

With prior approval the OSF Security Officer may authorize to external system connection (e.g., remotely connecting to an alternative WSR-88D system) provided that a) the connection is needed to support NWS or DOD Operations; and b) the connection can be accomplished in a manner that protects the WSR-88D system from "denial of service" risk.

#### 4-12 AUTHORIZED WSR-88D RDA/RPG REMOTE ACCESS TERMINAL

RDA/RPG Remote Access Terminal is authorized only for specific individual site personnel, and may be restricted to specific WSR-88D operations; diagnostics; or to a specific period of time. Authorized users may only dial into the system using equipment, telephone numbers, modems, and procedures specifically approved by the OSF Security Officer. In order to minimize the vulnerability of password information to disclosure to unauthorized persons, user authentication based on individual specific passwords is required. Each site will have a single user point of contact responsible for their site's remote access password and their site's password protection.

#### 4-13 HOST SECURITY

Individual site personnel responsible for host security shall be identified for each RDA and RPG host. The individual is responsible for the PC configuration, including adding, configuring, and removing passwords, and for following the procedures established by the OSF Security Officer. **Unrestricted** 

<u>access to the host system</u> (so-called "super-user" access) <u>shall not be granted</u>. Access to all individual user passwords must be protected with great vigilance.

All systems shall be protected by passwords. After the password is assigned, it is the individual user's responsibility to ensure password security. Users shall follow the guidelines listed below to protect their passwords:

- a. Passwords should be changed at least once every six months;
- b. Passwords should never be written down or disclosed to any unauthorized person;
- c. Passwords should be chosen with care. Examples of easily guessed passwords include: names in any form (first, last, middle, equipment names, (e.g., RDA, RPG, Wiretap), license plate numbers, social security numbers, birth dates, car model names). A good password choice is two easily-remembered, but unrelated words joined by a punctuation character.
- d. It is the responsibility of the individual user to comply with the password policy.

Improperly configured RDA/RPG Remote Access Terminal equipment can create security vulnerabilities by providing unintended "back-door" access to the WSR-88D system. For this reason, <u>all WSR-88D RDA/RPG Remote Access Terminal equipment must be configured with password protection and conform to the guidelines established by the OSF Security Officer</u>. Extreme care must be taken to prevent unauthorized use of RDA/RPG Remote Access Terminal equipment to gain access to WSR-88D.

## 4-14 RESPONDING TO POLICY VIOLATIONS

A security incident is any suspected event that could pose a threat to the integrity, availability, safety, or confidentiality of WSR-88D equipment, applications, personnel or data. Security incidents shall be reported to the OSF Security Officer. Since the availability of WSR-88D is critical to the NWS mission and protection of lives and property, the highest incident response priority is restoring of service and protecting the system from further attack.

The WSR-88D Security Officer is responsible for formally investigating and documenting security incidents as previously described and recommending security steps to be taken in response. The NEXRAD Program Leader and the OSF Director are responsible for responding to the actual incident.

In the event of a potential security violation perform the following steps:

## STEPS FOR OPERATORS

- 1. Cancel and exit pcANYWHERE software. This will disconnect the modem and prevent remote access. It will not impact local RPG or RDA operations.
- 2. Contact maintenance personnel.

# STEPS FOR MAINTAINERS

- 1. If pcANYWHERE has not been closed already, close pcANYWHERE software on both RDA/RPG Remote Access Terminals (in both the UCP and the RDA MMI position). Consider the potential for unauthorized use in both locations, even though only one location may be affected.
- 2. Evaluate the software configuration of the equipment and perform RDA/RPG Remote Access

Troubleshooting procedures.

- 3. Verify normal RDA and RPG operations or perform normal RDA and RPG troubleshooting procedures if the equipment is inoperable.
- 4. If any unauthorized software appears to be installed on the RDA/RPG Remote Access Terminal equipment, attempt to identify the software, attempt to determine the source (who installed it) and return the terminal to the NRC for repair. (Unauthorized software is any software that is not explicitly authorized by the OSF and was not delivered with the equipment.) Further, if the source of the unauthorized software can be determined, have the person review the RDA/RPG Remote Access Terminal Security Policy in the User's manual.
- 5. Determine if accidental reconfiguration is likely and reconfigure the equipment if it is necessary, and possible to do. Re establish remote access through pcANYWHERE software. If it is not possible to reconfigure the equipment and accidental reconfiguration has been determined, return the CPU to the NRC for repair.

## OTHERWISE:

- 6. Determine if security breach is likely.
- 7. Gather the following information to provide to the OSF Hotline:
  - a. Approximate date/time of suspected occurrence:
  - b. RDA MMI position/UCP position:
  - c. Telephone number used for this equipment:
  - d. Telephone company used:
  - e. Terminal equipment operable/inoperable:
  - f. RDA/RPG operable/inoperable:
  - g. Terminal equipment reconfigured/normal:
  - h. RDA/RPG software reconfigured/normal:
  - i. Person reporting suspected violation:
  - j. Person initially observing suspected violation:
  - k. Contact phone number:
  - l. Description (provide as much detail as possible):
- 8. Contact the OSF Hotline at 1-800-643-3363 and provide the Hotline with the information gathered.

## 4-15 POLICY DISTRIBUTION

The OSF Security policy shall be distributed to all affected sites. All users including operators and maintainers should review and understand this policy.